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1358
State of Minnesota v. 3M Co.,
Court File No. 27-CV-10-28862

ATTORNEY GENERAL

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Minnesota Pollution Control Agency
Division of Solid and Hazardous Waste
Site Response Section

Board Action Sheet

Board Date: April 25, 1989

Project Manager: Dan Douglas

Date: April 25, 1989

Board Agenda Title: Request for issuance of a Request for Response Action To The Huntington Elevator Company Regarding Contamination At The Lansing Site Located in Lansing Township, Nowell County
Board Action:

Approved as presented: Yes

Denied _____

Approved with the following changes: None (See attached resolution)

Tabled: Yes _____ No X If yes, until when? _____

Signed: Dan Douglas

Dated: April 25, 1989

MINNESOTA POLLUTION CONTROL AGENCY
Ground Water and Solid Waste Division

Agenda Item Control Sheet

MR

Agenda # 14

MEETING DATE: April 25, 1989

APPEARANCE REQUESTED ~~YES~~ NO: SCHEDULED TIME: 10:35 A.M.

PREPARED BY: Davis Douglas *gmw* DATE MAILED: April 14, 1989

TITLE: Request For Issuance Of A Request For Response Action To The Huntting Elevator Company Regarding Contamination At The Lansing Site Located In Lansing Township, Mower County

LOCATION: Lansing Mower
CITY COUNTY

TYPE OF ACTION: Minnesota Environmental Response and Liability Act (Superfund)

RECOMMENDED ACTION: Issuance of a Request for Response Action

ISSUE STATEMENT: Soil and ground water beneath and near the Huntting Elevator Company (Huntting) in Lansing, Minnesota are contaminated by pesticides. The Lansing Site (Site) is located in Lansing Township, near Lansing (Unincorporated), Minnesota, Mower County. Huntting owns and leases property on the Lansing Site and has been in operation at the Site since 1957. The Minnesota Department of Health issued drinking water advisories to six residential wells and the U.S. Post Office well in 1987. A Director's Determination of Emergency was issued on March 18, 1987, to allow use of state Superfund money to finance the immediate provision of safe drinking water and to finance a Limited Remedial Investigation (LRI) to determine the source of the contamination and a Focused Feasibility Study (FFS) to determine alternatives for a long-term water supply. In response to a Minnesota Pollution Control Agency (MPCA) staff request, a study was begun by Huntting to determine the extent and magnitude of soil and ground water contamination on the Lansing Site. Huntting installed monitoring wells and sampled them. In June 1987, Huntting denied MPCA staff access to its property and refused to split samples. After disputes over the scope of the investigation and failure to agree on investigation parameters acceptable to MPCA staff, MPCA staff commenced an LRI/FFS in April 1988. The LRI and FFS are now completed. Contaminants in ground water on or near the Lansing Site consist of pesticides. However, to date the extent and magnitude of the soil and ground water contamination has not been fully determined. Therefore, completion of the Remedial Investigation and Feasibility Study (RI/FS) and development and implementation of a Response Action Plan for the Lansing Site and implementation of a long-term water supply are required and there is a need to issue to Huntting a Request for Response Action for the purpose of completing this work.

ATTACHMENTS:

1. Request for Response Actions with Exhibits
2. Site Maps (2a and 2b)
3. Definitions
4. MPCA Long-Term Water Supply Record of Decision
5. Minnesota Department of Agriculture Delegation of Inspection Powers
6. Minnesota Department of Agriculture Delegation of Chapter 18B Powers
7. Attorney General Staff's Memorandum
8. MPCA Staff Memoranda/Bottled Water (8a and 8b)

MINNESOTA POLLUTION CONTROL AGENCY
Ground Water and Solid Waste Division
Site Response Section

Request For Issuance Of A Request For Response Action
To The Huntting Elevator Company Regarding
Contamination At The Lansing Site Located
In Lansing Township, Mower County

April 25, 1989

ISSUE STATEMENT

Soil and ground water beneath and near the Huntting Elevator Company (Huntting) in Lansing, Minnesota are contaminated by pesticides. The Lansing Site (Site) is located in Lansing Township, near Lansing (Unincorporated), Minnesota, Mower County. Huntting owns and leases property on the Lansing Site and has been in operation at the Site since 1957. The Minnesota Department of Health issued drinking water advisories to six residential wells and the U.S. Post Office well in 1987. A Director's Determination of Emergency was issued on March 18, 1987, to allow use of state Superfund money to finance the immediate provision of safe drinking water and to finance a Limited Remedial Investigation (LRI) to determine the source of the contamination and a Focused Feasibility Study (FFS) to determine alternatives for a long-term water supply. In response to a Minnesota Pollution Control Agency (MPCA) staff request, a study was begun by Huntting to determine the extent and magnitude of soil and ground water contamination on the Lansing Site. Huntting installed monitoring wells and sampled them. In June 1987, Huntting denied MPCA staff access to its property and refused to split samples. After disputes over the scope of the investigation and failure to agree on investigation parameters acceptable to MPCA staff, MPCA staff commenced an LRI/FFS in April 1988. The LRI and FFS are now completed. Contaminants in ground water on or near the Lansing Site consist of pesticides. However, to date the extent and magnitude of the soil and ground water contamination has not been fully determined. Therefore, completion of the Remedial Investigation and Feasibility Study (RI/FS) and development and implementation of a Response Action Plan for the Lansing Site and implementation of a long-term water supply are required and there is a need to issue to Huntting a Request for Response Action for the purpose of completing this work.

I. Background

A. Statutory Authorities of the MPCA

The Environmental Response and Liability Act (Minnesota Superfund Act), Minn. Stat. ch. 115B (1988), establishes procedures through which the MPCA

can protect the public health or welfare or the environment from the release or threatened release of hazardous substances. The operative provisions of Minn. Stat. ch. 115B with respect to removal and remedial action are contained in Minn. Stat. § 115B.17 (1988). Section 115B.17, subd. 1 provides that:

Whenever there is a release or substantial threat of release from a facility of any pollutant or contaminant which presents an imminent and substantial danger to the public health or welfare or the environment or whenever a hazardous substance is released or there is a threatened release of a hazardous substance from a facility:

- (a) The agency may take any removal or remedial action relating to the hazardous substance, or pollutant or contaminant, which the agency deems necessary to protect the public health or welfare or the environment. Before taking any action the agency shall:
 - (1) Request any responsible party known to the agency to take actions which the agency deems reasonable and necessary to protect the public health or welfare or the environment, stating the reasons for the actions, a reasonable time for beginning and completing the actions taking into account the urgency of the actions for protecting the public health or welfare or the environment, and the intention of the agency to take action if the requested actions are not taken as requested;
 - (2) Notify the owner of real property where the facility is located or where response actions are proposed to be taken, if the owner is not a responsible party, that responsible parties have been requested to take response actions and that the owner's cooperation will be required in order for responsible parties or the agency to take those actions; and
 - (3) Determine that the actions requested by the agency will not be taken by any known responsible party in the manner and within the time requested.
- (b) The commissioner of the pollution control agency may take removal action which the commissioner of the pollution control agency deems necessary to protect the public health or welfare or the environment if the commissioner of the pollution control agency determines that the release or threatened release constitutes an emergency requiring immediate action to prevent, minimize or mitigate damage to the public health or welfare or the environment. Before taking any action the commissioner of the pollution control agency shall make reasonable efforts in light of the urgency of the action to follow the procedure provided in clause (a).

Minn. Stat. § 115B.17, subd. 2 (1988) provides that:

Subd. 2. Other actions. Whenever the agency or commissioner of the pollution control agency is authorized to act pursuant to subdivision 1

or whenever the agency or commissioner of the pollution control agency has reason to believe that a release of a hazardous substance, or a pollutant or contaminant, has occurred or is about to occur, or that illness, disease, or complaints thereof may be attributable to exposure to a hazardous substance, or a pollutant or contaminant, the agency or commissioner of the pollution control agency may undertake investigations, monitoring, surveys, testing, and other similar activities necessary or appropriate to identify the existence and extent of the release or threat thereof, the source and nature of the hazardous substances, or pollutants or contaminants, and the extent of danger to the public health or welfare or the environment. In addition, the agency may undertake planning, legal, fiscal, economic, engineering, architectural, and other studies or investigations necessary or appropriate to plan and direct a response action, to recover the costs of the response action, and to enforce the provisions of sections 115B.01 to 115B.18.

Therefore, section 115B.17, subpart 1(b) provides that the MPCA Commissioner may take removal action when the Commissioner determines that an emergency exists. "Removal action" is defined to include "actions necessary to monitor, test, analyze, and evaluate a release or threatened release of a hazardous substance, pollutant or contaminant." Minn. Stat. § 115B.02, subp. 17 (1988). Additionally, section 115B.17, subpart 2 provides that whenever the MPCA Commissioner has reason to believe that a release of a hazardous substance, pollutant or contaminant has occurred, the Commissioner may undertake investigations, monitoring, surveys and testing to identify the existence and extent of the release, the source of the release and the extent of danger to the public health, welfare and the environment from the release. The Commissioner also may make studies or investigations necessary to plan a response action. Before the MPCA takes the response action, section 115B.17, subp. 1(a), the MPCA must (1) issue Requests for Response Action (RFRA) to responsible parties known to the MPCA; (2) notify the owners of the property at which the RFRA is directed (if the owners are not responsible parties); and, (3) determine that no known responsible party will take the actions within the manner and time requested.

In addition, section 115B.17 provides that, before it can issue a RFRA, the MPCA must find that (1) there is a release or threatened release; (2) there is a facility; (3) the release or threatened release is from that facility; (4) the release or threatened release involves either (a) a pollutant or contaminant which presents an imminent or substantial danger to the public health, welfare or the environment or (b) a hazardous substance; and, (5) the person(s) to whom the RFRA are to be directed are responsible parties. The terms release, facility, pollutant or contaminant, hazardous substance, and responsible parties are all defined in the Minnesota Superfund Act. These definitions are set out in Attachment 3 and discussed in Part II of this Board Item.

The attached proposed RFRA refers to authority found in Minn. Stat. §§ 115B.17 and 115B.18 (1988) (the Minnesota Superfund Act). (See I.A. of the attached RFRA.) The discussion above describes the requirements of a RFRA issued under section 115B.17. The discussion below explains the applicability and requirements of a section 115B.18 RFRA, and the relationship between sections 115B.17 and 115B.18.

Section 115B.17 establishes both the procedures through which the MPCA requires responsible parties to take removal and remedial action and the prerequisites for the MPCA to take the action itself. Among other things, section 115B.18 establishes procedures for bringing actions against responsible parties to compel performance of response actions, to impose civil penalties and for injunctive relief.

Like section 115B.17, section 115B.18 includes a provision related to RFRAs:

Subd. 3. REQUESTS FOR RESPONSE ACTION. A request for emergency removal action shall be made by the Director. Other Requests for Response Actions shall be made by the agency. A request shall be in writing, shall state the action requested, the reasons for the action, and a reasonable time by which the action must be begun and completed taking into account the urgency of the action for protection of the public health or welfare or the environment.

An action to compel performance or impose civil penalties under section 115B.18 may be brought against any responsible person who fails to take response actions requested under the subdivision quoted above, or who fails to make reasonable progress to complete those actions. Therefore, in effect, section 115B.18 requires the MPCA to issue a RFRA prior to bringing an action to compel performance or to impose civil penalties.

The content of both section 115B.17 and section 115B.18 RFRAs are largely the same: All section 115B.17 RFRAs will be sufficient to constitute section 115B.18 RFRAs.¹ It is therefore efficient and reasonable for the MPCA to issue a joint section 115B.17 and section 115B.18 RFRA.

There is, however, a substantive difference in the actions that MPCA must take under section 115B.17 and under section 115B.18 after it has issued a Request for Response Action. That is, under section 115B.17, the MPCA may not take a removal or remedial action until after it finds that no responsible party will take the action in the time and manner requested in the Request for Response Action. Under section 115B.18, however, the MPCA need not make this finding in order to request the Attorney General to commence an action to compel performance or impose civil penalties.

Since the Minnesota Superfund Act was enacted, it has been and continues to be the opinion of the MPCA staff that, where possible, the MPCA should attempt to obtain from responsible persons a negotiated settlement on the response actions that are needed to be undertaken to clean up a hazardous waste site. In the MPCA staff's view, the issuance of a RFRA should not be considered the end to negotiations, but instead a useful and important step through which

1. Prior to making section 115B.17 Requests, the MPCA must make five preliminary determinations (see discussion above). Although it is not explicitly required, these five determinations probably need also be made before a section 115B.18 Request is issued.

negotiations can be brought to a successful completion. The MPCA staff further believes that the actions specified in RFRAs provide a sound basis for such negotiations.

In the MPCA staff's view, the procedure is as follows: the MPCA Board issues a RFRA. Either (a) the responsible party and the MPCA staff continue to negotiate and reach agreement on a Consent Order resolving the issues raised in the RFRA, or (b) the responsible party performs the requested actions or acceptable alternatives, without agreeing on a Consent Order, or (c) responsible party refuse to undertake the actions specified in the RFRA. If negotiations are fruitful, MPCA staff will return to the MPCA Board requesting its approval of a signed Consent Order. If responsible parties refuse to perform the requested actions, MPCA staff will bring the matter back to the MPCA Board for a determination that the responsible parties will not take the necessary actions in the manner or time requested within the established time periods.

B. Statutory Authorities of the Minnesota Department of Agriculture

The Pesticide Control Act, Minn. Stat. ch. 18B (1988), establishes procedures through which the Minnesota Department of Agriculture (MDA) can prevent ground water contamination by pesticides. The Commissioner of the MDA may take action to prevent ground water contamination under Minn. Stat.

§ 18B.10:

The commissioner may, by rule, special order, or delegation through written regulatory agreement with officials of other approved agencies, take action necessary to prevent the contamination of ground water resulting from leaching of pesticides through the soil, from the backsiphoning or backflowing of pesticides through water wells, or from the direct flowage of pesticides to ground water.

Additionally, the Commissioner of the MDA may respond to pesticide release incidents under Minn. Stat. § 18B.15 (1988):

Subdivision 1. Duties of responsible party.

(a) A responsible party involved in an incident must immediately report the incident to the department of agriculture and provide information as requested by the commissioner. The responsible party must pay for the costs and immediately take all action necessary to minimize or abate the release and to recover pesticides involved in the incident...

Subdivision 2. Commissioner's action.

(a) If in the judgment of the commissioner the responsible party does not take immediate and sufficient action to abate the release of and to recover the pesticide, the commissioner may take action necessary to mitigate or correct the conditions resulting from an incident. The responsible party must reimburse the commissioner for the costs incurred by the commissioner in the enforcement of this subdivision...

Chapter 18B provides the Commissioner of the MDA with the power to recover civil penalties, cleanup costs, damages to wildlife and other damages, as well as the power to seek an injunction, to compel performance, and criminal penalties. Minn. Stat. §§ 18B.20, 18B.21, 18B.23, 18B.25 (1988).

The Commissioner of the MDA is authorized to delegate enforcement and other regulatory duties of chapter 18B to another state agency. Minn. Stat. §§ 18B.03, subd. 3 and 18B.01, subd. 2 (1988). On June 24, 1987, the Commissioner of the MDA delegated the inspection powers contained in Minn. Stat. § 18B.18 to the MPCA, (attached as Attachment 5) and has assisted the MPCA staff with its investigation of the Lansing Site. The Commissioner of the MDA has now delegated to the MPCA his power, under chapter 18B, to take cleanup action to prevent further contamination of ground water by pesticides, abate the release of pesticides, and to provide a long-term water supply for affected Lansing residents (attached as Attachment 6). The MPCA staff recommends exercise of these powers through the proposed RFRA.

II. Discussion

This discussion is divided into eight sections, one providing a narrative discussion of the history underlying the proposed RFRA (Part II.A.); one for

each of the determinations that must be made before a RFRA can be issued (Parts II.B. - II.F.); one describing the requested action (Part II.G.); and finally, one describing actions to be taken after the RFRA is issued (Part II.H.).

A. History Underlying this Request for Response Action

On November 3, 1986, the Minnesota Department of Agriculture (MDA) staff sampled water from a private drinking water well (the Haustein well) immediately east of the Huntting Elevator Company (Huntting) in Lansing, Minnesota. In a memorandum dated January 28, 1987, the MDA staff notified the MPCA and Minnesota Department of Health (MDH) staffs that water from the private drinking well was found to be contaminated with three pesticides: alachlor, cyanazine, and atrazine. The MDA staff also noted that the well was near Huntting, a pesticide/fertilizer mixing and loading facility. In a letter dated February 3, 1987, the MDH staff issued a drinking water advisory to the private drinking water well.

Following a meeting of the staffs of the MPCA, MDA, and MDH, on February 6, 1987, the MPCA and MDA staffs resampled the shallow private drinking water well, six other shallow private drinking wells and the deep Huntting well. The following pesticides were found in these wells: alachlor, cyanazine, metolachlor, metribuzin, EPTC, atrazine, chlorothalonil, dicamba, 2,4-D, and prometon. Not all of these pesticides were found in each well; however, in general, the highest concentrations and the highest number of pesticides per well were found in the shallow wells nearest to the Huntting property. The pesticides showing the highest concentrations were alachlor, metolachlor, and atrazine. EPTC is a fungicide; all the other pesticides found are herbicides.

In letters dated March 4 and 5, 1987, the MDH staff issued a private drinking water well advisory to the owners of the shallow private drinking water

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wells immediately east of the Hunting property and issued private drinking water well advisories to five other wells, including the deep Hunting well and the U.S. Post Office Well. Subsequent resampling of the deep Hunting well did not confirm the presence of pesticides in the well and the MDH dropped its advisory to this well. The MDH well advisories were advisories not to drink or cook with the well water.

Beginning on March 2, 1987, the MDA staff conducted an investigation of the Lansing area to determine if a major pesticide spill could be found. No evidence of a major spill was found near the Hunting property, near the unnamed creek flowing through Lansing, and on property where irrigation wells were installed in the Lansing area.

After reviewing the data from the February 6, 1987, sampling, on March 9, 1987, the MDA staff informed the MPCA staff that based upon the number of pesticides detected, the concentration of the pesticides detected, and the extent of contamination, the ground water pesticide contamination found in the Lansing residential wells with MDH drinking water advisories was not the result of normal farming practices.

In a letter dated March 6, 1987, the Assistant Commissioner of MDA, Anne Kanten, informed Thomas Kalitowski, MPCA Director, that the MDA would not access the State Superfund under the provisions of Minn. Stat. § 115B.17, subd. 8 for the purpose of investigation and cleanup for the ground water pesticide contamination in Lansing, but would assist the MPCA staff with the investigation and cleanup. On April 15, 1987, the MPCA staff agreed to this proposal in light of MPCA's expertise in implementing the Minnesota Superfund Act and acknowledged the need for MPCA and MDA to continue to move forward in a partnership in the investigation and cleanup of the ground water pesticide contamination in Lansing.

In a letter dated June 24, 1987, the Commissioner of the MDA designated the MPCA staff as agents of the Commissioner for purposes of assisting in the general administration of the provisions of Minn. Stat. § 18A.3 (2), subd. 1 (1986) and Minn. Stat. § 18B.18 (Supp. 1987). This authority was given concurrently to the MDA staff.

On March 10, 1987, MPCA staff sampled eleven more drinking water wells in addition to resampling the shallow private drinking water well immediately east of the Huntting property and the deep Huntting well. No additional drinking water well advisories were issued as a result of this sampling round.

On March 11, 1987, MPCA staff met with Huntting staff. In the meeting, Huntting agreed to consider conducting an investigation of its property for possible soil and ground water contamination.

In an MPCA staff letter dated March 23, 1987, the MPCA staff requested that Huntting conduct an investigation of soil and ground water contamination at and near the Huntting property and that Huntting prepare a draft soil and ground water study plan for the MPCA staff's review prior to implementation of the study. In the letter, the MPCA staff requested Huntting to identify areas where releases could have occurred, to identify ground water flow direction, and to identify the extent of possible soil and ground water contamination.

On March 12, 1987, the MPCA staff requested Huntting to provide bottled water to the Lansing residents which had received MDH drinking water well advisories. On March 16, 1987, Huntting refused to supply bottled water to these residents. (See Attachments 8a and 8b.)

On March 18, 1987, a Director's Determination of Emergency was signed by Thomas Kalitowski providing for removal actions within the meaning of the Minnesota Superfund Act including provisions of an emergency water supply, conduct of a Limited Remedial Investigation (LRI) and a long-term water supply

Focused Feasibility Study (FFS). The objectives of the LRI and FFS were to conduct investigations and evaluations to determine the magnitude and extent ground water contamination, to determine the source of ground water contamination, and to determine the most cost-effective means of providing a permanent alternative source of potable water for affected residents of Lansing. On March 20, 1987, safe drinking water deliveries began to residents in the impacted residential area.

As of the date of the Director's Determination of Emergency, the MPCA staff did not have sufficient Site specific data to identify any source of the ground water contamination in Lansing. As stated above, one of the objectives of the investigation was to determine the source of ground water contamination. The MPCA staff's previous requests of Hunting to conduct an investigation as described above was to provide additional information as to the source of the ground water contamination in Lansing. In including the LRI and FFS in the Determination of Emergency, the MPCA staff was ensuring an expeditious investigation of the pesticide contamination problem and a speedy solution to the provision of a long-term permanent water supply.

On March 25, 1987, a State Multi-site Superfund contractor, Malcolm Pirnie, Inc.(MPI), was assigned to the ground water pesticide project in Lansing for purposes of conducting an LRI and a FFS for the ground water pesticide contamination in Lansing. Pursuant to the MPCA's contracts with multi-site contractors, the MPCA staff first assigns a site to one of the contractors. The assigned contractor then prepares a support document work plan which details how the contractor will complete a support document for an LRI/FFS. Upon receipt of MPCA staff approval, a work order is issued to the contractor to begin work on an LRI/FFS support document, which collects the data necessary to plan the conduct of the LRI/FFS. A Notice-To-Proceed is issued to the contractor to

commence the actual LRI/FFS on the Site. The initial site assignment and work plan were commenced as authorized by the declaration of emergency on the Lansing Site and to be prepared in the event that the MPCA staff had to conduct the LRI/FFS on the Site.

On March 30, 1987, the MDH issued two more drinking water advisories to two private drinking water wells based upon their proximity to the contaminated wells. Subsequent sampling of these wells confirmed that they were contaminated with pesticides. The MPCA staff also supplied bottled water to these residents.

On April 1, 1987, the MPCA staff in consultation with the MDA staff, issued a Request for Information and Production of Documents (RFI) to Huntting concerning possible information Huntting had relative to the possible release or threatened release of pesticides, hazardous substances, pollutants or contaminants.

On April 27, 1987, in addition to the Huntting well, seven more previously untested private drinking water wells were sampled; however, none of these wells were issued MDH drinking water well advisories. Water and sediments from the unnamed creek near the impacted residential area were also sampled. No pesticides were found in the creek sediments and only low levels of atrazine were found in the creek water.

Huntting responded to the RFI in a certified response dated June 4, 1987. The RFI indicated that Huntting is the present owner of the Huntting Elevator Company in Lansing, either owning the property or leasing parcels from the Soo Line Railroad. Huntting indicated that its operations began in Lansing in 1957. Huntting indicated that the company buys and sells grain and soybeans, sells livestock feed, grinds and mixes livestock feed, and sells fertilizers and pesticides. The Huntting's RFI response listed records from 1981 to 1986 by product sold to customers and/or prepared and applied by Huntting for its

customers. On that list are: alachlor (Lasso), cyanazine (Bladex), metolachlor (Dual), atrazine (Aatrex), metribuzin (Sencor and Lexone), 2,4-D (Amine 2,4-D), and prometon (Pramitel), dicamba (Banvel) and EPTC (Eradicane), the pesticides found in the ground water in the affected wells.

In response to the MPCA staff's meeting of March 11, 1987, Huntting in a letter dated May 22, 1987, indicated that Huntting intended to begin a ground water investigation of the Huntting property. Three ground water monitoring wells were installed on the Huntting property in June 1987, and sampled.

Sampling results from Huntting's ground water study indicated that ground water under the Huntting property was contaminated with alachlor, cyanazine, metolachlor, metribuzin, atrazine and prometon. The well water from some of the wells exceed the MDH's Recommended Allowable Limits for alachlor, metolachlor, and atrazine.

In the spring and summer of 1987, the MPCA and MDA staffs attempted to get Huntting to undertake an appropriate investigation of the pesticide contamination on Huntting property. On June 16, 1987, MPCA staff were refused access to the Huntting property and were not allowed the opportunity to split soil samples. On June 23, 1987, the MPCA and MDA staffs wrote a letter to Huntting stating that they required access to the property to conduct soil sampling and to take samples from the monitoring wells. Huntting replied that it would permit sampling on its property only upon state assurance that no analyses would be run except for pesticides. The MPCA and MDA staffs replied that:

The MPCA and MDA insist on determining what analyses need be run in order to discharge their obligations to protect public health, welfare and the environment. At present, MPCA intends to sample not only for pesticides but also for other compounds such as those found in so-called "inert" ingredients in pesticide formulations, ingredients in application oils with which the pesticides are customarily mixed, and heavy metals which are associated with pesticides.

In a letter dated July 6, 1987, the MPCA staff emphasized the importance of reasonable access to the Huntting property to conduct its investigation.

On July 8, 1987, Huntting replied by questioning the MPCA's right to access to its property, conditioned splitting of samples upon an advance agreement to limit the scope of initial analysis of the samples, and offered cooperation conditioned upon a prior agreement limiting the scope of future investigation. Huntting also denied that it is responsible for the pesticide contamination, and suggested that the Haustein property immediately east of the Huntting property may be a source. On August 12, 1987, Huntting proposed to test samples from its monitoring wells for six pesticides and install a deep well to supply water to the impacted residential area.

On September 4, 1987, the MPCA staff responded that:

...additional investigation is necessary to positively identify the source(s) of pesticide contamination in Lansing. Data submitted by Liesch [Huntting's consultant] indicates that Huntting may be one source of the pesticide contamination problem. To cease investigation at this juncture because of the offer of a replacement water supply would risk further migration of pesticides into uncontaminated areas and potential human exposure.

The MPCA staff outlined its investigative goals as: determining the direction and rate of flow of the ground water, the extent and content of the plume of pesticide contamination, and vertical extent of contamination. The MPCA staff sought to install and sample the monitoring wells near the Huntting property for pesticides and volatile organic compounds (VOCs), and do a soil and ground water investigation of the Huntting property. The letter asked Huntting to indicate which tasks it would undertake and to respond to the MPCA and MDA staff request for access to the Huntting property.

On September 10, 1987, the MPCA staff asked MPI to proceed to plan the conduct of an LRI/FFS at the Lansing Site. The MPCA staff determined that it was appropriate to start planning the LRI/FFS given the lack of progress in getting Huntting to conduct an appropriate investigation, continued denial of access to the Huntting property, and Huntting's persistent denial of responsibility for the pesticide contamination. An LRI/FFS would address the need to determine the appropriate way to provide a safe long-term water supply to affected Lansing residents and independently assess the Huntting claim that Huntting is not a source of the pesticide contamination.

On September 28, 1987, Huntting replied to the MPCA staff letter of September 4, 1987. Huntting sought to eliminate the soil investigation and to limit the testing of the ground water samples to two pesticides, with no analysis for VOCs. Huntting wanted the MPCA and MDA to agree to release Huntting from all further liability for the site if quarterly tests for the two pesticides showed "on average, no statistically significant increase in pesticides in the ground water" over a one-year period. Huntting stated that it was not prepared to provide the impacted residential area with a permanent water supply without the rest of the case being settled, and reiterated its denial of responsibility for the pesticide contamination in Lansing.

The MPCA staff responded to Huntting's proposal on October 8, 1987, by stating that the release from all further responsibility for remedial and response actions requested by Huntting "has never been provided in the history of the MPCA Superfund program. Such releases are beyond the powers of the Agency and would be in derogation of the statutory responsibility of the Agency to protect public health, welfare, and the environment."

The MPCA staff, in performing its public responsibility, could neither agree to Huntting's proposal to construct a drinking water well conditioned upon

restricted investigation of the nature and extent of the contamination and release of Huntting from responsibility for the contamination and cleanup, nor could the MPCA staff accede to the limitations upon investigation that Huntting sought to impose as a condition of Huntting's performance of any investigative work. In view of this, and Huntting's persistent denial of responsibility for the pesticide contamination in Lansing, the MPCA staff decided to proceed with the LRI/FFS to address water supply issues and to determine the source(s) of the pesticide contamination in Lansing.

On April 29, 1988, the MPCA staff issued a Notice-To-Proceed to MPI to conduct the LRI and FFS. The LRI and FFS Final Reports were approved by the MPCA staff on January 4, 1989. The LRI Final Report concluded that Huntting was a source of the pesticide contamination of ground water which resulted in the MDH issuing drinking water well advisories to the seven drinking wells in Lansing.

The LRI included construction of nine ground water monitoring wells installed at five locations to document the types of soils in the area, to verify the direction of ground water flow both vertically and horizontally, and to obtain ground water samples for analysis. Results showed that ground water flows generally to the east southeast, the upgradient wells were clean, and the shallow and mid-depth wells immediately downgradient of the Huntting facility on the Haustein property were impacted by one or more pesticides.

In addition, soil samples were taken along seven transects on the property immediately to the east of the Huntting property. These were composited for analysis and no pesticides were found in the soil samples.

On May 6, 1988, the MDA staff, responding to a complaint about an alleged spill on the Huntting property, collected and analyzed soil samples from

Huntting Site. The following pesticides were found in the soil: trifluralin, alachlor, metolachlor, and chlorpyrifos.

MPCA and MDA staff sent a draft Consent Order to Huntting on September 1, 1988. It was mutually agreed to delay Huntting's response until the LRI/FFS reports were complete. Huntting received the draft LRI in November 1988 and the final LRI/FFS in December 1988. Huntting submitted a response on January 20, 1989. Staff met with Huntting on March 1, 1989, to discuss the Consent Order and RFRA options. Huntting did not wish to pursue a Consent Order at this time.

Pursuant to the administrative process under the Minnesota Superfund Act, a Commissioner's Notice was sent to Huntting on March 17, 1989. Huntting responded to that notice on April 3, 1989, and opposes issuance of a RFRA. The MPCA staff's response to Huntting's comments are addressed in this board item. A memorandum from the Attorney General's staff is attached (Attachment 7) in response to one legal issue raised by Huntting in the April 3 letter.

In this case, the MPCA staff could not obtain agreement with Huntting on how the investigation would be conducted and proceeded with on LRI/FFS. With Huntting denying access to its property and disclaiming responsibility for the release, the MPCA staff investigated to determine how best to provide a long-term water supply to affected residents of Lansing, to determine the source of the contamination, and to ascertain who is a responsible party. As a result of the LRI/FFS, the MPCA staff believes that Huntting is a responsible party under chapters 18B and 115B, and seek a RFRA from the MPCA to Huntting to complete investigation, commence cleanup, and install a long-term water supply for affected Lansing residents.

The Focused Feasibility Study evaluated four general alternatives for a long-term water supply for the seven affected well owners. The four

alternatives were: no action; replacement with individual deeper wells; replacement with one deeper communal well; and connection to a municipal water supply.

The MPCA staff selected replacement of individual wells for the seven residents and solicited public comment between February 23 and March 8, 1989. The MPCA staff then evaluated public comments received and prepared a Record of Decision (ROD) dated April 13, 1989, (attached as Attachment 4) documenting the selection of the long-term water supply remedy.

The MPCA staff rejected the no action alternative because it does not protect public health; rejected the communal well alternative because it would require the establishment of a homeowners' association, which would be an unacceptable burden on the residents; and rejected the municipal water system alternative because no such system currently exists for the township. The township of Lansing has been considering a municipal water supply for over 20 years. The finding of pesticides above RALs in some of the township wells was viewed as support for requesting a Small Cities Development Program (SCDP) grant from the Department of Trade and Economic Development (DTED) grants program in 1988 to implement a municipal water system. However, DTED did not award the grant to Lansing Township because only the seven wells in the IRA out of the approximately 80 wells in the proposed system were in need of mitigation. The grant application was not viewed as competitive.

B. There is a Release

As set out in Attachment 3 of this Board Item, "Release" is defined broadly in Minn. Stat. § 115B.02, subd. 15 (1988) to mean "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment which occurred at a point in time or which continues to occur". See Attachment 3. Minn. Stat. § 115B.02,

subd. 15 excludes from the definition of "release" "any release resulting from the application of fertilizer or agricultural or silvicultural chemicals, or disposal of emptied pesticide containers or residues from a pesticide as defined in section 18A.21, subdivision 25."

The pesticides at the Huntting Site are not excluded from the definition of "release" in Minn. Stat. § 115B.02, subd. 15, because substances found at the Huntting Site are not the result of any release resulting from the application of fertilizer or agricultural or silvicultural chemicals, or disposal of emptied containers or residues from a pesticide, as defined in Minn. Stat. § 18A.21, subd. 25. Essentially, the intent of Minn. Stat. § 115B.02, subd. 15 relates to pesticide residues from the application of pesticides under approved application rates. This exception does not apply to release of pesticides from the Huntting property. As indicated in an MDA staff letter to the MPCA staff, dated March 9, 1987, the pesticide ground water contamination situation in Lansing was not the result of normal farming practices. Moreover, in the LRI, two upgradient wells were installed to monitor conditions in the shallow aquifer. Both of these wells showed no pesticides, therefore the local ground water was not affected by pesticides from normal farming practices in the area.

A release of hazardous substances (see part II.E.) at the Lansing Site is confirmed by test results from analysis of ground water samples which show contamination with the pesticides alachlor, cyanazine, metolachlor, metribuzin, and prometon. Pesticides found downgradient of the Huntting property are shown on Column 5 on the table of Part II.E. Metolachlor and alachlor were also found in the soils on the Huntting property. Therefore, there have been one or more releases within the meaning of Minn. Stat. § 115B.02, subd. 15 and continues to be a threatened release of hazardous substances at the Site. Furthermore, there

has been contamination of ground water resulting from leaking of pesticides through the soil within the meaning of Minn. Stat. § 18B.10 and there is a threat of further migration of pesticides through the ground water.

C. There is a Facility

As set out in Attachment 3, "Facility" is defined broadly in Minn. Stat. § 115B.02, subd. 5 to mean:

- (a) Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft;
- (b) Any watercraft of any description, or other artificial contrivance used or capable of being used as a means of transportation on water; or
- (c) Any site or area where a hazardous substance, or a pollutant or contaminant, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

"Facility" does not include any consumer product in consumer use. Test results from analysis of ground water and soil taken at the Lansing Site and the Huntting property clearly indicate that the ground water and soil are contaminated with hazardous substances. Therefore, the Huntting property constitutes a facility within the meaning of Minn. Stat. § 115B.02, subds. 5(a) and 5(c).

D. The Release or Threatened Release is from the Facility

Test results from ground water samples taken at the Huntting property by Huntting have confirmed that the ground water beneath the property is contaminated with atrazine, alachlor, cyanazine, metolachlor, and metribuzin, and prometon. The hazardous substances are not present in monitoring wells upgradient of the Huntting property nor is there any other source identified adjacent to the property. Metolachlor and alachlor were also found in the soils on the Huntting property. No pesticides were found in analysis of soil samples

from the Haustein property, which is adjacent to the Huntting property. It has been determined that the pesticide contamination is not the result of normal farming practices. All of the pesticides were or are handled by Huntting at the facility. Therefore, it is concluded that the release of atrazine, alachlor, cyanazine, metolachlor, and metribuzin is from the facility.

E. The Release Involves Several Pesticides and Hazardous Substances

Substances found at the Lansing Site are pesticides within the meaning of Minn. Stat. § 18B.01, subd. 18. These substances are also hazardous substances pursuant to Minn. Stat. §§ 115B.02, subds. 8 and 9; 116.06, subd. 13 (1988). As set out in Attachment 3, "Hazardous Substance" is defined broadly in Minn. Stat. § 115B.02, subd. 8, to mean:

- (a) Any commercial chemical designated pursuant to the Federal Water Pollution Control Act, under 33 United States Code section 1321(b)(2)(A);
- (b) Any hazardous air pollutant listed pursuant to the Clean Air Act, under 42 United States Code Section 7412; and
- (c) Any hazardous waste.

"Hazardous substance" does not include natural gas, natural gas liquids, liquefied natural gas, synthetic gas usable for fuel or mixtures of such synthetic gas and natural gas, nor does it include petroleum, including crude oil or any fraction thereof which is not otherwise a hazardous waste.

"Hazardous waste," which is included as a "hazardous substance" under Subdivision 8(c) is defined in Minn. Stat. § 115B.02, subd. 9, to mean:

- (a) Any hazardous waste as defined in section 116.06, subd. 13, and any substance identified as a hazardous waste pursuant to rules adopted by the agency under section 116.07; and
- (b) Any hazardous waste as defined in the Resource Conservation and Recovery Act, under 42 United States Code section 6903, which is listed or has the characteristics identified under 42 United States Code section 6921, not including any hazardous waste the regulation of which has been suspended by act of Congress.

Minn. Stat. § 116.06, subd. 13 (1988) provides that:

"Hazardous waste" means any refuse, sludge, or other waste material or combinations of refuse, sludge, or other waste materials in solid, semisolid, liquid or contained gaseous form which because of its quantity, concentration, or chemical, physical, or infectious characteristics may (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed....

Substances that are defined as hazardous under these definitions have been found at the Site. The following chart lists the known hazardous substances that have been released, lists the Recommended Allowable Limit (RAL) for drinking water for each pesticide set by Minnesota Department of Health, and shows the statute or rule under which the pesticide is classified as hazardous, as well as the maximum concentration thus far detected in soil and ground water at or near the Site:

Released Substances

Pesticide (RAL in ppb)	(1) Minn. Stat. 116.06, subd. 13		(2) Minn. Rule Pt. 7045.0135	(3) CWA 40 CFR 116.4	(4) RCRA 40 CFR Part 261	(5) Maximum Concentration i Ground Water(pp
	EPA List of suspected Carcinogens	Amount Exceeds State RAL				
Alachlor(6)	X	X				53.62(13.0)
Cyanazine(9)		X				10.00(.16)
Metolachlor(10)	X	X				58.00(34.0)
Metribuzin(175)						1.66(.54)
EPTC*(35)						0.11
Atrazine(3)	X	X				38.85(7.9)
Dicamba*(9)				X		.07
2,4-D(70)			X	X	X	2.58
Prometon(No RAL)						6.15(3.4)
Trifluralin*						
Chlorpyrifos*						

*Not confirmed to date by additional sampling.

If there is an X in column 1, the substance is a hazardous substance under section 115B.02 subd. 8 (c) because it is a hazardous waste under sections 115B.02, subd. 9 (a) and 116.06, subd. 13. Substances have been classified under column 1 if they either are classified as potential carcinogens by EPA or have been found in the ground water in levels exceeding the Department of Health's RAL, or both. A RAL is set to prevent serious long-term health effects on persons who consume the water.

If there is an X in column 2, the substance is a hazardous substance as a result of its classification under State of Minnesota Hazardous Waste Rules; if there is an X in column 3, the substance is a hazardous substance as a result of its classification under the Clean Water Act; and if there is an X in column 4, the substance is a hazardous substance or constituent under the Resource Conservation and Recovery Act. The maximum concentration of alachlor found in the soil on the Huntting property was .35 parts per million (ppm); for cyanazine was 1.02 ppm; for trifluralin was .04 ppm; and for chlorpyrifos was .04 ppm. To date, these test results have not been confirmed by a second round of testing. Column 5 shows the maximum concentration of pesticides found in the ground water downgradient of the Huntting property; in parentheses is the maximum concentration of pesticides found in the ground water on the Huntting property.

All of the above cited pesticides were handled by Huntting and were prepared and applied by Huntting for its customers.

The concentration of alachlor, cyanazine, metolachlor and atrazine in ground water on or downgradient of the Huntting property have all exceeded their respective RALs at one time or another during the study period. Three of the pesticides found in ground water at Lansing have been classified by EPA in regards to their potential as carcinogens. Alachlor is classified as a probable human carcinogen. Metolachlor and atrazine are classified as possible human

carcinogens. Based on both of these health based criteria (RALs and EPA classification as potential carcinogens), alachlor, cyanazine, metolachlor, and atrazine, which have been found on the site to exceed RALs, meet the definition of hazardous waste under Minn. Stat. § 116.06, subd. 13 (1988) because they may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness.

F. The Person to Whom the Response Request is Directed is a Responsible Party

As set out in Attachment 3, "Responsible Person" ² is generally defined in Minn. Stat. § 115B.03, subd. 1, to include persons who:

- (a) Owned or operated the facility: (1) when the hazardous substance, or pollutant or contaminant, was placed or came to be located in or on the facility; (2) when the hazardous substance, or pollutant or contaminant, was located in or on the facility but before the release; or (3) during the time of the release or threatened release;
- (b) Owned or possessed the hazardous substance, or pollutant or contaminant, and arranged, by contract, agreement or otherwise, for the disposal, treatment or transport for disposal or treatment of the hazardous substance, or pollutant or contaminant; or
- (c) Knew or reasonably should have known that waste the person accepted for transport to a disposal or treatment facility contained a hazardous substance, or pollutant or contaminant, and either selected the facility to which it was transported or disposed of in a manner contrary to law.

Huntting is a responsible person under Minn. Stat. § 115B.03, subd.

1(a), because Huntting owned, leased, and operated the facility when the hazardous substances were placed or came to be placed in or on the facility.

The pesticide contamination is not the result of normal farming practices and is

2. Minn. Stat. § 115B.17 refers to "Responsible Parties". While there is no definition of "Responsible Parties," there is a definition of "Responsible Persons" in the Act. The definition applies when the Minnesota Superfund Act refers to either "Responsible Persons" or "Responsible Parties."

not present upgradient of the Huntting property; the pesticides found in wells downgradient of the Huntting property are handled by Huntting in its business operations. Huntting owned and operated the facility when the hazardous substances (pesticides) came to be located on the facility and during the time of the release. To the extent that Huntting owns property on the Site, it is not excluded from responsibility under exceptions to responsibility of owners of real property, Minn. Stat. § 115B.03, subd. 3 (1988), because Huntting's business operations included transportation of hazardous substances to the facility, and storing and mixing them at the facility. See Minn. Stat. § 115B.03, subd. 3(a) (in attachment 3).

Huntting is also a responsible party under Minn. Stat. §§ 18B.15 and 18B.01, subs. 12 and 23 (1988), because the pesticides found in Lansing were released into the environment from Huntting's property.

G. The Requested Response Actions are Reasonable and Necessary

The attached proposed RFRA describes a series of actions to be taken at the Site. These actions are reasonable and necessary to protect the public health, welfare, or the environment. These actions are necessary to gather additional information that will complete the identification, assessment, choice, and design of response actions for the Site, as well as the implementation of the response actions at the Site.

The LRI/FFS were done to determine the proper way to provide a long-term water supply and to identify the source(s) of the pesticide contamination in Lansing. Further investigation is needed in a Remedial Investigation (RI)/Feasibility Study (FS) to determine the extent of contamination on the Huntting property, to which the MPCA staff has been denied access, and to ascertain what is needed for source control and remediation of

contaminated ground water. Finally, the response action must be planned and implemented to address the contaminated ground water.

The response actions described in the attached proposed RFRA include:

- (1) Complete a Remedial Investigation on the Huntting property;
- (2) Conduct a Feasibility Study (FS) to evaluate alternative potential response actions to address the source of the pesticide contamination;
- (3) Prepare and implement a Response Action Plan;
- (4) Implement a long-term water supply;
- (5) Provide bottled water; and
- (6) Reimburse the MPCA and MDA for state expenses.

The MPCA and MDA staff have evaluated the length of time it takes to accomplish the actions specified in the proposed RFRA, have considered the urgency of the situation, and have established a reasonable schedule for completing these actions commensurate with these considerations.

III. Conclusions

The Huntting property located in Lansing Township near Lansing (Unincorporated), Mower County, Minnesota constitutes a facility within the meaning of Minn. Stat. § 115B.02, subds. 5(a) and 5(c).

The wastes or substances found or disposed of at and near the Huntting property are pesticides within the meaning of Minn. Stat. § 18B.01, subd. 18 and are hazardous substances within the meaning of Minn. Stat. § 115B.02, subds. 8 and 9 and Minn. Stat. § 116.06, subd. 13.

There have been one or more releases and continues to be a threatened release of these pesticides and hazardous substances from the Huntting property within the meaning of Minn. Stat. § 115B.02, subd. 15 and Minn. Stat. § 18B.10.

These releases and threatened releases are from the facility.

With respect to these releases and threatened releases, Huntting is a responsible person within the meaning of Minn. Stat. § 115B.03, subds. 1(a) and a responsible party within the meaning of Minn. Stat. §§ 18B.15 and 18B.01, subds. 12 and 23.

The schedules for the requested actions in the attached proposed RFRA are reasonable taking into account the actions necessary for protecting the public health or welfare or the environment and to prevent ground water contamination.

IV. Recommendation

The MPCA staff recommends that the MPCA Board adopt the suggested staff resolution on the following page.

SUGGESTED STAFF RESOLUTION

BE IT RESOLVED, that the Minnesota Pollution Control Agency makes the following determinations:

1. The Huntting Elevator property located in Lansing Township, near Lansing, Mower County, Minnesota, constitutes a facility within the meaning of Minn. Stat. § 115B.02, subs. 5(a) and 5(c).
2. The wastes and substances found or disposed of at and near the Huntting Elevator property are pesticides within the meaning of Minn. Stat. § 18B.01, subd. 18 and are hazardous substances within the meaning of Minn. Stat. § 115B.02, subs. 8 and 9 and Minn. Stat. § 116.06, subd. 13.
3. There have been one or more releases and there continues to be a threatened release of these pesticides and hazardous substances from the Huntting Elevator property within the meaning of Minn. Stat. § 115B.02, subd. 15 and Minn. Stat. § 18B.10.
4. These releases and threatened releases are from the Huntting Elevator property.
5. With respect to these releases and threatened releases, the Huntting Elevator Company is a responsible person within the meaning of Minn. Stat. § 115B.03, subs. 1(a) and a responsible party within the meaning of Minn. Stat. §§ 18B.15 and 18B.01, subs. 12 and 23.
6. The actions requested in the Request for Response Action are reasonable and necessary to protect the public health or welfare or the environment and to prevent ground water contamination.
7. The schedule for requested action in the Request for Response Action is reasonable taking into account the urgency of the actions for protecting the public health or welfare or the environment and preventing ground water contamination.

BE IT FURTHER RESOLVED that, based on these determinations, the Minnesota Pollution Control Agency hereby issues the Request for Response Action to the Hunting Elevator Company. The Chairman and the Commissioner are authorized to execute the Request for Response Action on behalf of the Minnesota Pollution Control Agency.

BE IT FURTHER RESOLVED that in issuing the Request for Response Action, the Minnesota Pollution Control Agency adopts the factual determinations and reasons set forth in the Agency staff's memorandum dated April 25, 1989, which accompanied the Agency staff's recommendation to the Agency.

STATE OF MINNESOTA
COUNTY OF RAMSEY

MINNESOTA POLLUTION
CONTROL AGENCY

In the Matter of the
Hunting Elevator Company
Hazardous Waste Site,
Mower County, Minnesota

REQUEST FOR
RESPONSE ACTION

To: The Hunting Elevator Company

I. NOTIFICATION OF OBLIGATION TO TAKE RESPONSE ACTION

- A. This document is issued by the Minnesota Pollution Control Agency (MPCA) and constitutes a Request for Response Action (RFRA), as authorized by Minn. Stat. §§ 115B.17 and 115B.18, and Minn. Stat. ch. 18B.
- B. YOU ARE HEREBY NOTIFIED that the MPCA has made the following determinations:
1. The property located in Lansing Township, near Lansing (Unincorporated), Mower County, known as the Hunting Elevator Company property constitutes a facility within the meaning of Minn. Stat. § 115B.02, subs. 5(a) and 5(b). (The property located is hereinafter referred to as "the Hunting Site" or "the Site");
 2. The wastes and substances found or disposed of at the Site are pesticides within the meaning of Minn. Stat. § 18B.01, subd. 18 and hazardous substances within the meaning of Minn. Stat. § 115B.02, subs. 8 and 9 and Minn. Stat. 116.06, subd. 13 (hereinafter referred to as "pesticides");
 3. There have been one or more releases within the meaning of Minn. Stat. § 115B.02, subd. 15 and Minn. Stat. § 18B.10 and continues to be a threatened release of these pesticides and hazardous substances from the facility;
 4. The releases and threatened releases are from the Site; and
 5. With respect to these releases and threatened releases, Hunting Elevator Company is a responsible person within the meaning of Minn. Stat. § 115B.03, subd. 1(a) and a responsible party within the meaning of Minn. Stat. §§ 18B.15 and 18B.01, subs. 12 and 23. (The Hunting Elevator Company is hereinafter referred to as the "Responsible Person.")
- C. Having made these determinations, the MPCA formally requests that the Responsible Person take the response actions described in Section II of this RFRA. A timetable for beginning and completing the actions is set out in Section III. The reasons for the requested actions are set out

in Section IV. Section V describes the intention of the MPCA to take action if the Responsible Person fails to take the requested response action within the timetable set out in Section III. Section V also describes the consequences of failure to satisfactorily respond to this RFRA.

- D. The Responsible Person must notify the MPCA staff by May 9, 1989, of its intention to undertake the response actions requested in the RFRA. Failure by the Responsible Person to notify the MPCA staff by May 9, 1989, of its intention to undertake the response actions may result in a determination by the MPCA under Minn. Stat. § 115B.17, subd. 1.(a)(3) and Minn. Stat. § 18B.15, subd. 2 (1988), that the actions requested will not be taken in a manner and within the time requested.

Notification of intent to meet with the MPCA staff should be sent to David N. Douglas, Project Manager, Division of Ground Water and Solid Waste, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155, telephone number (612) 296-7818.

- E. If the Responsible Person does not otherwise agree to take the requested actions, the matter will be referred to the MPCA for a Determination That Actions Will Not Be Taken in the Manner and Time Requested. The MPCA, upon determining that a Responsible Person has not adequately responded, may authorize litigation to require the Responsible Person to take necessary response actions and/or reimburse the State for costs incurred if the State elects to implement response actions. These steps are described more fully in Section V.

II. REQUESTED RESPONSE ACTIONS

The MPCA has determined (1) that the following actions constitute removal or remedial actions (response actions) within the meaning of Minn. Stat. § 115B.02, subds. 16 and 17 and Minn. Stat. §§ 18B.10 and 18B.15, and (2) that these response actions are reasonable and necessary to protect the public health, welfare or the environment. Consequently, the MPCA hereby formally requests that the Responsible Person take the response actions within the timetables established in Section III.

A. Remedial Investigation (RI)

The purpose of the RI is to provide sufficient information to allow selection and implementation of response actions to mitigate the release of pesticides at the Site. The requirements of the RI are described in Exhibit A to this RFRA. Exhibit A is appended to and made an integral part of this RFRA.

B. Feasibility Study (FS)

The purpose of the Feasibility Study (FS) is to provide a detailed evaluation of the feasibility and effectiveness of implementing alternative response actions at the Site. The FS shall use and build upon the information generated by the RI. The requirements of the FS are described in Exhibit A to this RFRA.

C. Response Action Plan (RAP) and Response Action Implementation

The purpose of the RAP is to provide a detailed design of response actions which, upon implementation, will protect the public health, welfare, and the environment from the threatened or actual release of pesticides associated with the Site. The requirements of the RAP and RAP implementation are described in Exhibit B to this RFRA. Exhibit B is appended to and made an integral part of this RFRA.

D. Provide a Safe Long-Term Source of Drinking Water to Affected Residents

The Responsible Person shall provide a safe long-term water supply to residents in the impacted residential area. The long-term water supply remedy selected by the MPCA which shall be implemented is individual deeper residential wells. The wells shall be drilled into the Upper Carbonate Aquifer at a depth of approximately 120-150 feet. The Responsible Person shall prepare a Long-Term Water Supply Response Action Plan and implement long-term response actions in the impacted residential area. The requirements of the long-term water supply are described in Exhibit C to this RFRA. Exhibit C is appended to and made an integral part of this RFRA. The long-term water supply for the residents in the impacted residential area shall meet all of the following requirements:

1. The long-term water supply shall be installed in a timely manner and consistent with Alternative 2 Option A described in the FFS prepared by Malcolm Pirnie, Inc. and approved by MPCA staff on January 4, 1989;
2. The long-term water supply shall meet all the requirements of the MDH;
3. The long-term water supply shall be designed to provide the residents in the impacted residential area with a safe, potable drinking water supply for twenty (20) years;
4. Any contracts transferring ownership of the long-term water supply clearly identify the party(s) responsible for operation and maintenance costs and for monitoring the water quality for the design life of twenty (20) years; and
5. All home owners in the impacted residential area shall agree with any transfer of ownership of the long-term water supply.

E. Provide Bottled Water to Affected Residents

The responsible person shall provide safe bottled water to residents with MDH drinking water well advisories until a safe long-term drinking water supply to these residents is implemented.

F. Recovery of Expenses

Within ninety (90) days of the effective date of the RFRA, the Responsible Person shall pay into the Environmental Response,

Compensation and Compliance Fund, by check payable to the Minnesota Pollution Control Agency, the sum of Three hundred forty six thousand three hundred eighty six dollars and fifty three cents (\$346,386.53) as reimbursement of the MPCA's and MDA's expenditures incurred in connection with the investigation of the Hunting Site.

Payment of this sum shall be in full and complete satisfaction of all past monetary claims of the MPCA and MDA for expenses associated with the release or threatened release of pesticides at the Hunting Site incurred prior to February 28, 1989, with the following exceptions: MPCA staff and indirect costs are through February 14, 1989, MPCA Attorney General costs are through January 31, 1989 (except that Attorney General costs for the Minnesota Department of Agriculture are through February 17, 1989), and bottled water costs are through November 30, 1988.

The Responsible Person shall reimburse the MPCA and MDA for expenses associated with any MPCA or MDA activities related to the implementation of this RFRA. Within sixty (60) days of the MPCA Commissioner's reimbursement statement, the Responsible Person shall separately pay the required sums to each Agency. The MPCA payment shall be made to the Environmental Response, Reimbursement Compensation and Compliance Fund, by check payable to the Minnesota Pollution Control Agency. The MDA payment shall be made to the Pesticide Regulatory Account (Number 111-019), by check payable to the Commissioner of the Minnesota Department of Agriculture.

G. Reports

The MPCA Commissioner shall be provided with progress reports once every month by the thirtieth day of each month. The progress reports shall describe activities conducted pursuant to this RFRA during the preceding month and activities planned for the next month. The progress reports shall be addressed to:

David N. Douglas, Project Manager
Division of Ground Water and Solid Waste Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155

III. TIMETABLE FOR COMPLETING THE REQUESTED RESPONSE ACTIONS

The MPCA, after considering the urgency of actions needed to protect public health or welfare or the environment, has determined that the following timetable is necessary and reasonable. The timetable refers to specific elements of Exhibits A, B and C to this RFRA.

Notice of Intent to Comply	May 9, 1989
Reimburse the MPCA and MDA for Past Expenses	Within 90 days of effective date of RFRA

Retain Consultant to Complete Requirements of Exhibit A	Within 14 days of effective date of RFRA.
Submit Site Security and Safety Plans	Within 30 days of effective date of RFRA.
Implement Site Security and Safety Plans	Within 60 days of effective date of RFRA.
Submit Exhibit A, Task V.A. RI Work Plan and QAPP	Within 45 days of effective date of RFRA.
Implement RI	Within 30 days after MPCA Commissioner's approval of RI Work Plan and QAPP.
Submit RI Final Report	Within 120 days after MPCA Commissioner's approval of the RI Work Plan.
Submit Alternatives Report	Within 30 days of MPCA Commissioner's acceptance of the RI Final Report.
Submit Detailed Analysis Report	Within 30 days of MPCA Commissioner's Notification of Review of Alternatives Report.
Retain Consultant to Complete Requirements of Exhibit B	Within 14 days of Approval of Detailed Analysis Report by MPCA Commissioner.
Submit RAP Work Plan and Monitoring Plan	Within 30 days of Retaining Consultant.
Submit RAP	Within 45 days of Approval by the MPCA Commissioner of RAP Work Plan.
Implement RAP	Within 30 days of Approval by MPCA Commissioner of RAP.
Report Results of RA Implementation	Within 30 days of completion of the RA.
Retain Consultant to Complete Requirements of Exhibit C	Within 14 days of effective date of RFRA.
Submit Long-Term Water Supply RAP Work Plan and Monitoring Plan	Within 14 days of Retaining Consultant

Submit Long-Term Water Supply RAP	Within 30 days of Approval by the MPCA Commissioner of Long-Term Water Supply RAP Work Plan.
Implement Long-Term Water Supply RAP	Within 30 days of Approval by MPCA Commissioner of Long-Term Water Supply RAP.
Report Results of Long-Term Water Supply RA Implementation	Within 30 days of completion of the Long-Term Water Supply RA.
Provide Bottled Water	Within 14 days of the effective date of RFRA.

The MPCA Commissioner shall be promptly notified of any anticipated or actual failure to comply with the dates or other terms of this RFRA. Such notice shall include the reasons for the noncompliance and steps proposed for a return to compliance or alternative actions proposed to comply with the intent of this RFRA. The MPCA Commissioner may accept or modify the proposed compliance measures if the Commissioner determines that such measures are adequate and that the need for the modification is not a result of failures within the control of the Responsible Person.

The MPCA Commissioner may grant extensions of the time schedules set forth in this RFRA in the event that the Responsible Person demonstrates to the Commissioner good cause for granting the extension. The extension shall be commensurate with the delays involved.

IV. REASONS FOR THE REQUESTED ACTION

Soil and ground water beneath and downgradient of the Site in Lansing Township, near Lansing (Unincorporated), Mower County is contaminated with pesticides and hazardous substances. Pesticides and hazardous substances are not present in the monitoring wells upgradient of the Site. Therefore, it is concluded that the Site is a source of the release and threatened release of pesticides and hazardous substances to the ground water.

Studies conducted to date on the extent of contamination at the Site have not yielded sufficient information to allow assessment, selection, design or implementation of response actions to remedy the release of pesticides and hazardous substances or to allow assessment, selection, design or implementation of methods to prevent additional or continued releases.

The requested actions set out in Sections II and III will provide such additional information as is necessary to fully evaluate and allow for selection, design and implementation of appropriate response actions to prevent additional or continued releases.

V. MPCA INTENTION TO TAKE ACTION AND CONSEQUENCES OF RESPONSIBLE PERSON'S FAILURE TO TAKE REQUESTED ACTION

A. YOU ARE HEREBY NOTIFIED that under the Minnesota Environmental Response and Liability Act, Minn. Stat. ch. 115B and the Pesticide Control Act, Minn. Stat. ch. 18B, if a responsible person fails to take the requested actions in an adequate or timely fashion, the responsible person may be subject to the following actions:

1. the MPCA may undertake or complete the requested response actions and seek reimbursement from responsible persons for all costs associated with such action; or
2. the responsible persons may be subject to an action to compel performance of the requested response action or for injunctive relief to enjoin the release or threatened release.

In either case a responsible person who fails to take the response actions requested by the MPCA in an adequate or timely fashion may be required to pay a civil penalty in an amount to be determined by the court of up to \$20,000 per day for each day that the responsible person fails to take reasonable and necessary response actions.

B. YOU ARE HEREBY FURTHER NOTIFIED that if you fail to take the requested response action, the MPCA intends to take one or more of the actions specified in A. above.

VI. REQUIREMENT TO REIMBURSE THE MPCA

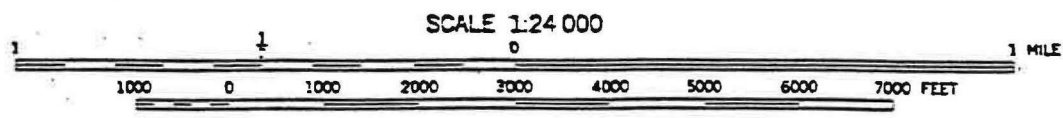
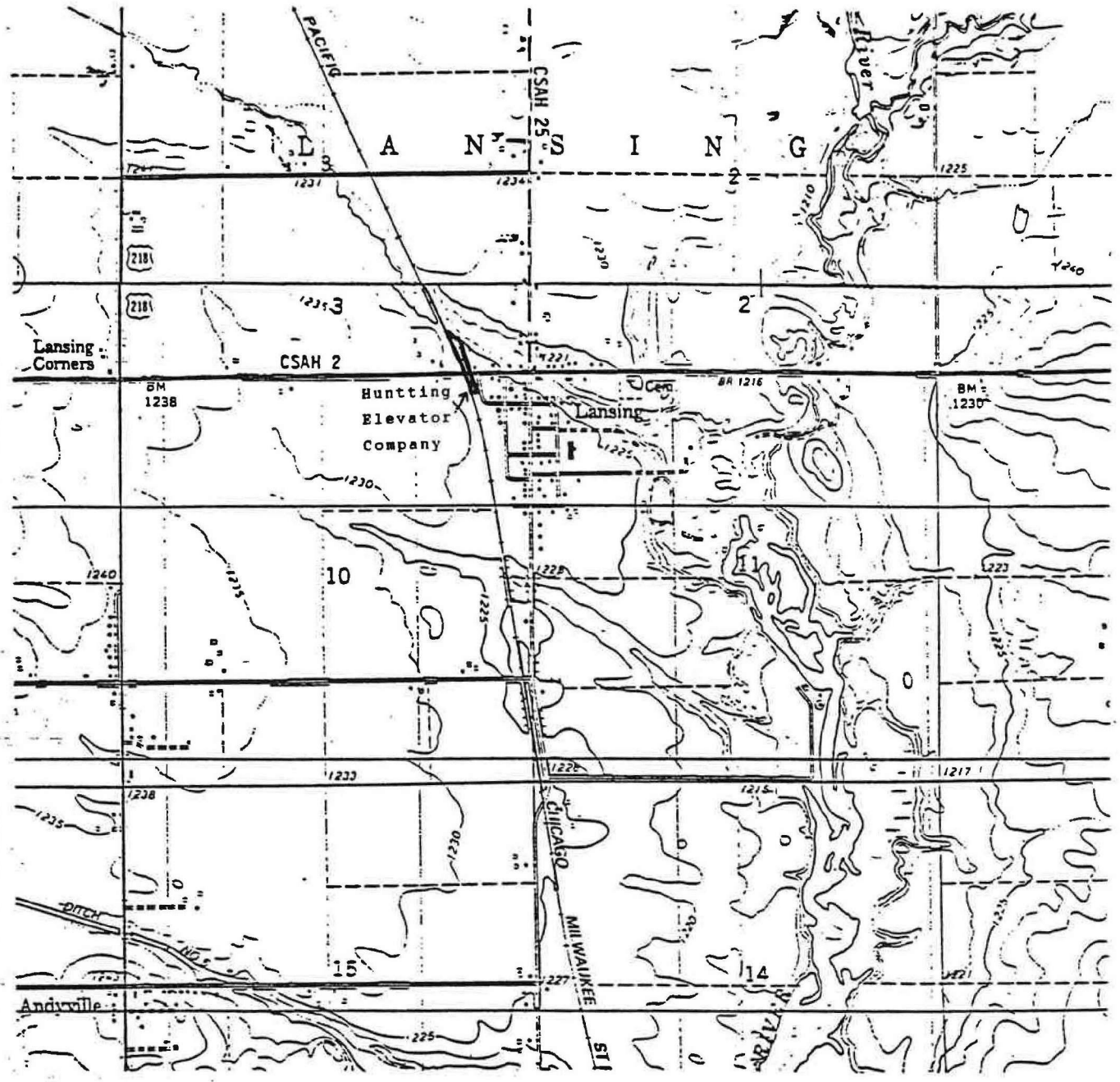
YOU ARE HEREBY FURTHER NOTIFIED that all responsible persons whether or not they complete the requested response action may be required to:

- A. reimburse the MPCA and MDA for all reasonable and necessary expenses it has incurred and continues to incur including all response costs, and administrative and legal expenses associated with the investigation and/or cleanup of the facilities; and
- B. pay for any damages to the natural resources resulting from the release of a pesticide, hazardous substance, pollutant or contaminant.

for
Daniel D. Joly
 Keith H. Langmo, Chairman
 DATE: 4/25/89

Gerald L. Willet
 Gerald L. Willet, Commissioner
 EFFECTIVE DATE: 4/26/89

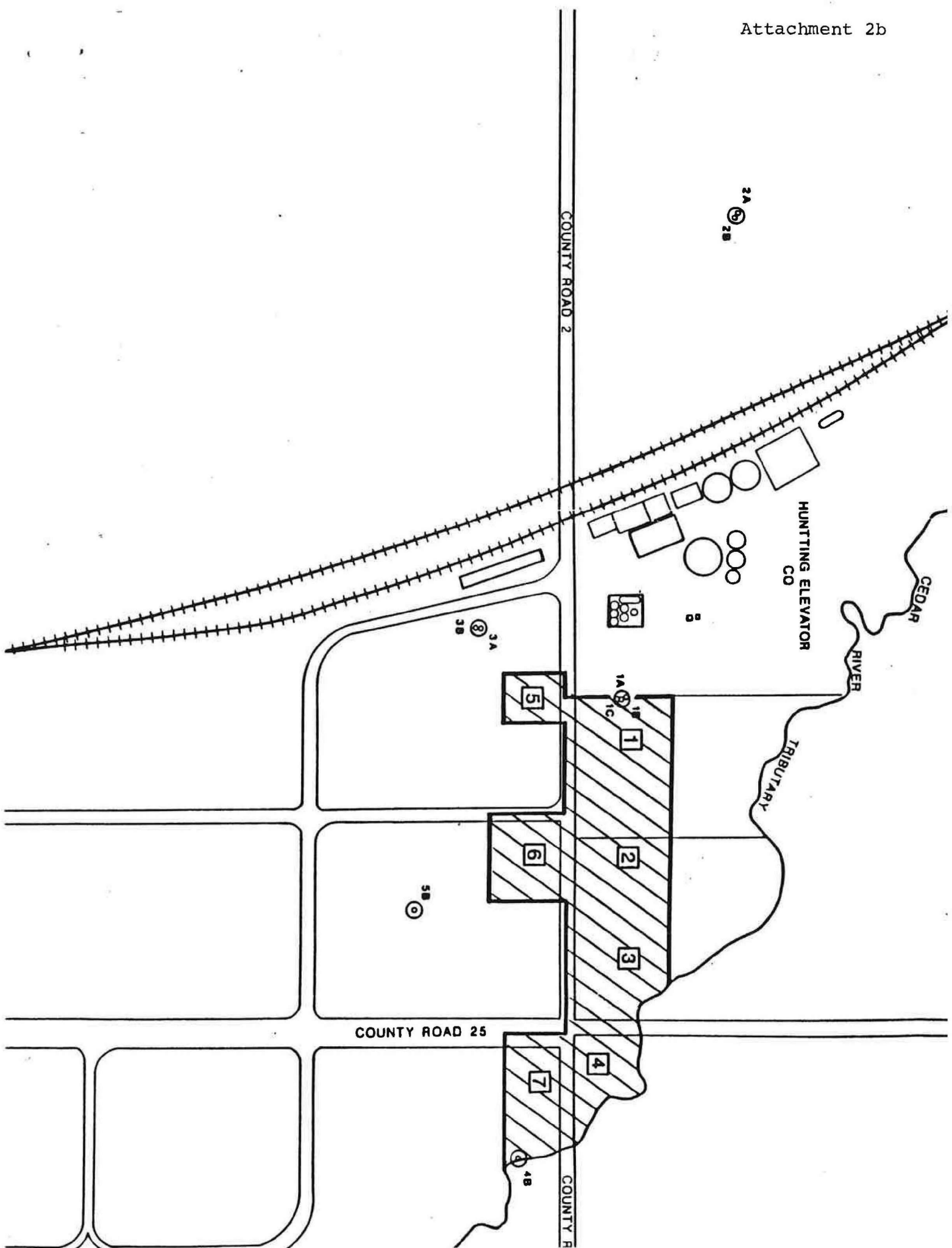
Minnesota Pollution Control Agency



**MALCOLM
PIRNIE**

LOCATION OF LANSING, MINNESOTA
AUSTIN EAST AND WALTHAM USGS 7.5 MINUTE
TOPOGRAPHIC QUADRANGLES

MALCOLM PIRNIE, INC.



DEFINITIONS

1. "RELEASE" is defined in Minn. Stat. § 115B.02, subd. 15

as follows:

"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment which occurred at a point in time or which continues to occur.

"Release" does not include:

(a) Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, watercraft, or pipeline pumping station engine;

(b) Release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, under 42 United States Code § 2014, if the release is subject to requirements with respect to financial protection established by the federal nuclear regulatory commission under 42 United States Code § 2210;

(c) Release of a source, byproduct or special nuclear material from any processing site designated pursuant to the Uranium Mill Tailings Radiation Control Act of 1978, under 42 United States Code § 7912(a)(1) or 7942(a); or

(d) Any release resulting from the application of fertilizer or agricultural or silvicultural chemicals, or disposal of emptied pesticide containers or residues from a pesticide as defined in § 18A.21, subd. 25.

2. "FACILITY" is defined in Minn. Stat. § 115B.02, subd. 5 as

follows:

"Facility" means:

(a) Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft;

(b) Any watercraft of any description, or other artificial contrivance used or capable of being used as a means of transportation on water; or

(c) Any site or area where a hazardous substance, or a pollutant or contaminant, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

"Facility" does not include any consumer product in consumer use.

3. "POLLUTANT OR CONTAMINANT" is defined in Minn. Stat. § 115B.02, subd. 13 as follows:

"Pollutant or contaminant" means any element, substance, compound, mixture, or agent, other than a hazardous substance, which after release from a facility and upon exposure of, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in the organisms or their offspring.

"Pollutant or contaminant" does not include natural gas, natural gas liquids, liquefied natural gas, synthetic gas usable for fuel, or mixtures of such synthetic gas and natural gas.

4. "HAZARDOUS SUBSTANCE" is defined in Minn. Stat. § 115B.02, subd. 8 as follows:

"Hazardous substance" means:

(a) Any commercial chemical designated pursuant to the Federal Water Pollution Control Act, under 33 United States Code § 1321(b)(2)(A);

(b) Any hazardous air pollutant listed pursuant to the Clean Air Act, under 42 United States Code § 7412; and

(c) Any hazardous waste.

"Hazardous substance" does not include natural gas, natural gas liquids, liquefied natural gas, synthetic gas usable for fuel or mixtures of such synthetic gas and natural gas, nor does it include petroleum, including crude oil or any fraction thereof which is not otherwise a hazardous waste.

5. "HAZARDOUS WASTE" is defined in Minn. Stat. § 115B.02, subd. 9 as follows:

"Hazardous waste" means:

(a) Any hazardous waste as defined in § 116.06, subd. 13, and any substance identified as a hazardous waste pursuant to rules adopted by the agency under § 116.07; and

(b) Any hazardous waste as defined in the Resource Conservation and Recovery Act, under 42 United State Code § 6903, which is listed or has the characteristics identified under 42 United States Code § 6921, not including any hazardous waste the regulation of which has been suspended by act of Congress.

6. "RESPONSIBLE PERSON" is defined in Minn. Stat. § 115B.03 as follows:

Subd. 1. General Rule. For the purposes of §§ 115B.01, to 115B.20, and except as provided in Subds. 2 and 3, a person is responsible for a release or threatened release of a hazardous substance, or a pollutant or contaminant, from a facility if the person:

(a) Owned or operated the facility: (1) when the hazardous substance, or pollutant or contaminant, was placed or came to be located in or on the facility; (2) when the hazardous substance, or pollutant or contaminant, was located in or on the facility but before the release; or (3) during the time of the release or threatened release;

(b) Owned or possessed the hazardous substance, or pollutant or contaminant, and arranged, by contract, agreement or otherwise, for the disposal, treatment or transport for disposal or treatment of the hazardous substance, or pollutant or contaminant; or

(c) Knew or reasonably should have known that waste he accepted for transport to a disposal or treatment facility contained a hazardous substance, or pollutant or contaminant, and either selected the facility to which it was transported or disposed of it in a manner contrary to law.

Subd. 2. Employees and Employers. When a person who is responsible for a release or threatened release as provided in subdivision 1 is an employee who is acting in the scope of his employment:

(a) The employee is subject to liability under § 115B.04 or 115B.05 only if his conduct with respect to the hazardous substance was negligent under circumstances in which he knew that the substance was hazardous and that his conduct, if negligent, could result in serious harm.

(b) His employer shall be considered a person responsible for the release or threatened release and is subject to liability under § 115B.04 or 115B.05 regardless of the degree of care exercised by the employee.

Subd. 3. Owner of Real Property. An owner of real property is not a person responsible for the release or threatened release of a hazardous substance from a facility in or on the property unless that person:

(a) was engaged in the business of generating, transporting, storing, treating, or disposing of a hazardous substance at the facility or disposing of waste at the facility, or knowingly permitted others to engage in such a business at the facility;

(b) knowingly permitted any person to make regular use of the facility for disposal of waste;

(c) knowingly permitted any person to use the facility for disposal of a hazardous substance;

(d) knew or reasonably should have known that a hazardous substance was located in or on the facility at the time right, title, or interest in the property was first acquired by the person and engaged in conduct by which he associated himself with the release; or

(e) took action which significantly contributed to the release after he knew or reasonably should have known that a hazardous substance was located in or on the facility.

For the purpose of clause (d), a written warranty, representation, or undertaking, which is set forth in an instrument conveying any right, title or interest in the real property and which is executed by the person conveying the right, title or interest, or which is set forth in any memorandum of any such instrument executed for the purpose of recording, is admissible as evidence of whether the person acquiring any right, title, or interest in the real property knew or reasonably should have known that a hazardous substance was located in or on the facility.

Any liability which accrues to an owner of real property under §§ 115B.01 to 115B.15 does not accrue to any other person who is not an owner of the real property merely because the other person holds some right, title, or interest in the real property.

An owner of real property on which a public utility easement is located is not a responsible person with respect to any release caused by any act or omission of the public utility which holds the easement in carrying out the specific use for which the easement was granted.

7. "RESPONSIBLE PARTY" is defined in Minn. Stat. § 18B.01, subd. 23 as follows:

"Responsible party" means a person who at the time of an incident has custody of, control of, or responsibility for a pesticide, pesticide container, or pesticide rinsate.

8. "PESTICIDE" is defined in Minn. Stat. § 18B.01, subd. 18 as follows:

"Pesticide" means a substance or mixture of substances intended to prevent, destroy, repel, or mitigate a pest, and a substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

9. "INCIDENT" is defined in Minn. Stat. § 18B.01, subd. 12 as follows:

"Incident" means a flood, fire, tornado, transportation accident, storage container rupture, portable container rupture, leak, spill, or other event that releases or threatens to release a pesticide accidentally or otherwise, and may cause unreasonable adverse effects on the environment.

"Incident" does not include the lawful use or intentional release of a pesticide in accordance with its approved labeling.

DeclarationSITE NAME AND LOCATION

Lansing Minnesota, an unincorporated community
Lansing Township, Mower County, Minnesota

A group of six residences and one post office were issued health advisories in March and April 1987, by the Minnesota Department of Health because of pesticides found in their drinking water wells. This group of residences and the post office are collectively called the Lansing Impacted Residential Area (IRA).

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedy for the Lansing IRA water supply system developed in accordance with the Minnesota Environmental Response and Liability Act (MERLA), and the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300).

DESCRIPTION OF THE SELECTED WATER SUPPLY REMEDY

The replacement water supply source selected for the Lansing IRA was developed to protect the health of the residents. The selected remedy is individual wells drilled into the Upper Carbonate Formation to replace the currently used shallow wells which are contaminated with pesticides and are threatened with continued pesticide contamination.

DECLARATION

The selected remedy is protective of human health, attains Federal and State requirements that are applicable or relevant and appropriate for this remedial action, and is cost effective.



Gerald L. Willet
Commissioner
Minnesota Pollution Control Agency

4/13/89

Date

Lansing Impacted Residential Area
Lansing (Unincorporated), Mower County, Minnesota
Record of Decision

I. SITE NAME, LOCATION AND DESCRIPTION

The city of Lansing (Unincorporated), with a population of approximately 250, is located about five miles north of Austin, Minnesota. The Lansing Impacted Residential Area (IRA) consists of 6 homes and a post office along and either side of County State Aid Highway 2, running east-west through Lansing Township. Drinking water well advisories have been issued by the Minnesota Department of Health (MDH) in 1987 to these six homes and the post office to not use their well water for drinking or cooking. Bottled water has been provided by the Minnesota Pollution Control Agency (MPCA) as a temporary substitute.

II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

A shallow aquifer in Lansing has been contaminated with various pesticide compounds, some exceeding MDH Recommended Allowable Limits (RALs) for drinking water. The Minnesota Department of Agriculture (MDA) sampled one private well in Lansing in November 1986. Results of analysis from a residential well immediately east of Huntting were received in January 1987, which indicated that two of the several pesticides found exceeded RALs. MDH, MDA, and MPCA staff met in February 1987 to discuss the appropriate actions and as a result of that meeting, samples of drinking water were obtained from 25 additional wells in Lansing through April 1987.

Results from the water sampling caused the MDH to issue a total of seven drinking water well advisories. In March of 1987, a Determination of Emergency was declared by the Executive Director of MPCA. State Superfund monies were spent to provide bottled water to the affected parties in the IRA and to begin a Limited Remedial Investigation and Focused Feasibility Study (LRI/FFS) for the Lansing area. The LRI/FFS objectives were to determine the extent and magnitude of ground water contamination, to determine the source of ground water contamination and to obtain necessary information to determine the most cost-effective means of providing a permanent alternative source of potable water for residents in the Lansing IRA.

Monitoring wells and soil borings were placed throughout the study area. Samples were obtained from private wells and monitoring wells. The direction of ground water flow was confirmed to be toward the east/southeast. The extent of pesticide contamination was determined to be limited to the shallow sand aquifer and an upward gradient was confirmed between the upper and lower sand units. The LRI Final Report, dated January 4, 1989, concluded that a source of the pesticide contamination is Huntting Elevator property. Investigative work on the Huntting Elevator property is expected to occur later in the process. Alternative water supply options were discussed in the FFS Final Report, dated January 4, 1989.

III. COMMUNITY RELATIONS

Public interest and media coverage of the ground water contamination in Lansing was highest during the period immediately following issuance of the drinking water well advisories. Three public meetings were held during spring and summer

of 1987. The township of Lansing has been considering a municipal water supply for over 20 years. The finding of pesticides above RALs in some of the township wells was viewed as support for requesting a Small Cities Development Program (SCDP) grant from the Department of Trade and Economic Development grants program to implement a municipal water system. However, the grant was not awarded to Lansing Township. Since only the seven wells in the IRA out of the approximately 80 wells in the township were in need of mitigation due to pesticide contamination, the grant application was not viewed as "competitive." Lansing Township may pursue alternate methods of demonstrating need and may reapply in the future.

A public comment period for the Proposed Plan containing the alternatives assessment and the recommended alternative began on February 23, 1989. A copy of the FFS Final Report was made available to the public at the information desk at the Austin Public Library. A responsiveness summary of the comments is attached to this document (Attachment 1), and will be made available to the public at the Austin Public Library.

IV. SCOPE OF RESPONSE ACTION

The selected remedy represents a response action for only a long-term water supply in the impacted residential area. Remedial investigation and feasibility study work will be conducted in the future to evaluate the source of the ground water contamination and determine the appropriate response action for source control and ground water remediation. At that time, another proposed plan and Record of Decision will be completed on the remedy for source remediation.

V. SITE CHARACTERISTICS

The nature and extent of the contamination at the Site, as determined from the LRI conducted to date, is described below.

LRI activities in the area included soil borings, installation and sampling of monitoring wells, and measurement of water levels. To date, nine monitoring wells have been installed at five locations. Twenty-eight soil samples were taken from seven transects on the property directly downgradient of the Hunting Elevator. Twenty-four of these were composited into seven for analyses of pesticides by the MDA laboratories. In addition, several private water supply wells were also sampled. The location of monitoring wells are shown on the attached map. (Attachment 2)

A. Ground water

Ground water samples collected during the LRI identified the presence of several pesticides in the shallow aquifer in the IRA. The pesticides which exceeded RALs at least once were atrazine, alachlor, cyanazine, and metolachlor. Other contaminants found at lesser concentrations were metribuzin, prometon, 2,4-D, dicamba, and EPTC. The lower sand aquifer showed no contamination and had an upward gradient which should prevent contamination from above. (This is based on results from monitoring wells installed in the area.) No houses in the IRA were found to have wells in the lower sand unit. Ground water samples from the first bedrock layer - the Upper Carbonate Unit - were obtained from two house wells and the Hunting Elevator well. These samples were analyzed for pesticides and none were analytically confirmed.

B. Soils

Soil sampling associated with the LRI has been limited to the property downgradient of the Huntting Elevator Company. No measurable contamination by pesticides was found in these soil samples. MDA obtained soil samples from on the Huntting property (associated with an alleged spill) which showed low levels of alachlor (0.35 ppm) and metolachlor (1.02 ppm) as well as trifluralin (.04 ppb) and chlorpyrifos (.04 ppm). Further investigation of soils on the Huntting property will be required in the Request for Response Action scheduled for MPCA Board action on April 25, 1989.

V. SUMMARY OF RISKS

A. Health Risk Assessment

An evaluation was performed using monitoring data collected prior to and during the LRI to estimate the potential impacts to human health and the environment. Because the residents in the IRA are served by individual shallow wells, the human exposure pathway of greatest concern is through ingestion by drinking contaminated ground water. The Minnesota Department of Health (MDH) performed the health risk assessments for Lansing. The MDH staff issued drinking water advisories based on recommended allowable limits (RALs) and on their judgment of the health risk of ingestion of multiple contaminants (even though each contaminant was below its RAL). The health risk assessment and subsequent advisories on the seven wells in the Lansing area were based on studies of long-term exposure to the following pesticides of concern:

Alachlor is classified as a probable human carcinogen. MDH has adopted as a RAL a concentration of 6 ug/l based on a lifetime ingestion of 2 liters per day presenting an increased cancer risk of one excess cancer per one hundred thousand population.

Atrazine and metolachlor are classified as possible human carcinogens. Atrazine has a RAL of 3 ug/l and metolachlor has a RAL of 10 ug/l under the same ingestion conditions as listed under alachlor above.

Cyanazine is not classified. At this time there is not enough information available to further classify this chemical. MDH has adopted a RAL of 9 ug/l for cyanazine.

B. Environmental Assessment

The MPCA staff has not been able to investigate on Huntting property, which has been determined to be the source of the contamination. Soils in the IRA are not contaminated. Surface water in the tributary to the Cedar River is not significantly different upgradient and downgradient of the IRA. Removing the shallow wells in the IRA will allow more of the pesticides in the shallow ground water to directly enter the tributary to the Cedar River until source control is implemented.

C. Comparison to Applicable or Relevant and Appropriate Requirements (ARARs)

RALs are health based drinking water criteria which are used by the State of Minnesota. There are no federal drinking water standards in effect for these

pesticides at this time. The concentrations of contaminants found in the wells in the IRA have exceeded RALs.

VI. DOCUMENTATION OF SIGNIFICANT CHANGES

No changes in the selected remedy have been made since the Fact Sheet/Proposed Plan was noticed and the comment period ended on March 8, 1989.

VII. DESCRIPTION OF ALTERNATIVES

A. Objectives for Alternative Water Supply

The primary objective for the FFS was to provide a long-term (20 year) drinking water supply for the residents in the Lansing IRA. The FFS approved on January 4, 1989, contained the following list of possible alternative water supply options.

- No action
- Individual deeper wells
 - a. Completed in Upper Carbonate Formation
 - b. Completed in Prairie du Chien Formation
- Community well for the IRA
 - a. Completed in Upper Carbonate Formation
 - b. Completed in Prairie du Chien Formation
- Connection to municipal well system (if constructed)

Each alternative was analyzed for the following eight criteria, used to evaluate alternatives at Superfund sites:

- | Does the alternative: | Is the alternative: |
|---|---------------------------------|
| - protect human health and the environment? | - effective in the short term? |
| - comply with health and environmental regulations: | - effective over the long term? |
| - reduce toxicity, movement, or volume of the contaminants? | - technically feasible? |
| | - acceptable to the community? |
| | - cost effective? |

The analysis of alternatives based on the criteria listed above is summarized in Table 1 below. A more detailed analysis of alternatives can be found in the FFS. An additional alternative was proposed by Hunting Elevator Company in comments on the Proposed Plan. That proposed alternative is evaluated using the above criteria in the responsiveness summary.

TABLE 1
THE ALTERNATIVES FOR A LONG-TERM WATER SUPPLY

<u>Alternative</u>	<u>Construction Cost</u>	<u>Comments</u>
1. No action except abandoning monitoring wells.	\$10,000	Does not protect public health.
2. Replacing seven affected wells with deeper individual wells.		Can be implemented quickly.
2A. Drilled into the Upper Carbonate Aquifer	\$155,000	Would be installed in the Upper Carbonate Aquifer. Should pesticides contaminate the aquifer during the 20 year life of the wells, they may be deepened into the Prairie du Chien Aquifer.
2B. Drilled into the Prairie du Chien Aquifer	\$667,000	
3. Replacing seven affected wells with one deeper communal well.		Can be implemented quickly. However, it would require establishment of a homeowner assn. to maintain well, pay for electricity, and collect payments from water users.
3A. Drilled into the Upper Carbonate Aquifer	\$99,000	
3B. Drilled into the Prairie Chien Aquifer	\$199,000	Initial installation in Upper Carbonate Aquifer. May be deepened under conditions discussed in Alternative 2.
4. Municipal water supply	\$66,000	Potential lowest cost to State but potentially longest time to implement. No municipal system yet exists for the township.

B. Alternatives After Screening

A comparison among alternatives is summarized in Table 2. The alternatives which are protective of public health and which can be implemented quickly are Options 2A and 2B. Option 2A is the preferred alternative where the individual wells are installed in the Upper Carbonate Unit. Option 2B is the default

TABLE 2

LANSING

COMPARISON AMONG ALTERNATIVES

<u>Evaluation Criteria</u>	<u>1</u>	<u>2a</u>	<u>2b</u>	<u>3a</u>	<u>3b</u>	<u>4</u>
Short-Term Effectiveness	-	+	+	+	+	-
Long-Term Effectiveness	-	+	+	+	+	+
Reduction of Toxicity, Mobility, Volume	-	-	-	-	-	-
Implementability						
Technical Feasibility	+	+	+	+	+	+
Administrative Feasibility	-	+	+	-	-	-
Availability of Services and Materials	+	+	+	+	+	-
Cost	+	+	-	+	-	+
Compliance with ARARs	-	+	+	+	+	+
Overall Protection of Human Health and Environment	-	+	+	+	+	+
Community Acceptance	-	+	+	-	-	+
TOTAL	-4	+8	+6	+3	+2	+2

Notes: + = generally favorable in comparison to other alternatives
 - = generally unfavorable in comparison to other alternatives

alternative in case the Upper Carbonate Unit becomes unpotable as assessed by Minnesota Department of Health Criteria within the required 20 year water supply period.

Concerning the Municipal water supply alternative, the average estimated cost of connection to the system per house is between \$6,000 and \$7,000. The 1988 assessed valuation of the township is \$7,040,000. There are 547 houses in Lansing Township. Eighty of these houses would be served by the system, which likely makes the connection costs prohibitively high in comparison to the estimated valuation of the properties served by the system.

A more detailed alternative analysis is available in the FFS Final Report.

VIII. SELECTED ALTERNATIVE

Based on current information, the MPCA staff selects Alternative 2A as the most appropriate water supply alternative for the Lansing Impacted Residential Area.

IX. SCHEDULE

The selected water supply alternative is expected to be implemented in accordance with the following schedule.

RFRA issued to Huntting Elevator Company	April 1989
Implement Water Supply Alternative 2B	August 1989

X. DOCUMENTS REVIEWED

Limited Remedial Investigation Final Report for Lansing Site
Malcolm Pirnie, Inc., December 1988

Focused Feasibility Study Final Report for Lansing Site
Malcolm Pirnie, Inc., December 1988

ATTACHMENT 1

IMPACTED RESIDENTIAL AREA LANSING, MINNESOTA PROPOSED LONG-TERM WATER SUPPLY

RESPONSIVENESS SUMMARY

This responsiveness summary documents community involvement during the public comment period on the proposed long-term water supply for the Impacted Residential Area (IRA) in Lansing, and responds to comments received. The summary also includes information on community relations activities conducted by the Minnesota Pollution Control Agency (MPCA) staff since the well contamination was discovered in 1987.

A. OVERVIEW

The MPCA staff's proposal for a long-term water supply for seven wells in the IRA in Lansing is to replace existing shallow wells with seven new, deeper wells, drilled into the Upper Carbonate aquifer.

Information on this proposal was provided to the affected parties through direct mail and to the community as a whole through the Austin news media, which covered the story extensively. A copy of the MPCA staff's Focused Feasibility Study discussing the alternative water supplies evaluated was made available in the community for review.

The MPCA staff received several comments during the comment period, from residents -- both those within the drinking water advisory area and others -- and from the Huntting Elevator Company (Huntting). The agency's response to the comments is contained in a later section of the responsiveness summary.

This responsiveness summary contains the following sections:

- Background on Community Involvement
- Summary of Comments Received and Agency Responses
- Remaining Issues

B. BACKGROUND ON COMMUNITY INVOLVEMENT

The MPCA staff has attempted to keep the community, especially the affected residents, aware of information relating to the site since the pesticide contamination was confirmed in the private wells in early 1987. At the time the Minnesota Department of Health issued the drinking water advisories, MPCA staff sent letters to all Lansing residents explaining the situation and informing them that additional well sampling would be conducted to determine whether other wells in the community were affected. At a public meeting held in March 1987, the MPCA staff announced preliminary sampling results that indicated no additional well advisories would be needed. The meeting also provided an opportunity for residents to ask questions about the contamination. A second public meeting in June 1987 and a third later that summer provided additional opportunities for the MPCA staff to respond to resident questions and concerns.

Community interest in the ground water contamination was highest in the early part of the project, when the contamination was first detected and bottled water delivery began. Similarly, news media interest was also highest initially, however, it decreased after the first six months.

The MPCA staff announced a 14-day comment period (February 23 through March 8, 1989) on the proposed water supply plan through a news release distributed to the Austin news media. The proposed plan and a the Focused Feasibility Study Final Report were made available at the Austin Public Library. In addition, a copy of the proposed plan was mailed to the seven affected well-owners, the township, the county, elected officials, and Hunting.

C. SUMMARY OF PUBLIC COMMENTS RECEIVED AND MPCA RESPONSES

Several comments were received during the public comment period. Many of the calls and letters received were from the affected residents and included questions, to which the MPCA staff responded. A summary of the comments received and the MPCA staff's responses to those comments is provided below:

Comment: Several residents, including those with affected wells and residents outside the drinking water advisory area, expressed support for replacing the seven wells with deeper wells. A few indicated that the estimated cost for the new wells as listed in the proposed plan seemed high.

MPCA Response: The MPCA agrees that the proposal for deeper, individual wells is the best alternative for a long-term water supply because it can be implemented in a timely manner and would not place an administrative burden on the affected residents as a communal well-system would. Relative to the cost estimates for the new wells, the MPCA staff note that the costs are estimated, pre-bid costs, and are likely to decrease after the competitive bidding process.

Responsiveness summary

Page 3

Comment: A few residents outside the drinking water advisory area expressed support for a municipal water system for all residents of Lansing.

MPCA response: A Lansing Township request for a Minnesota Department of Trade and Economic Development (DTED) grant to construct a municipal water system has been denied by DTED. This decision makes it unlikely that financing for a municipal system would be available in the foreseeable future.

Because the MPCA staff investigation has indicated that the contamination is not likely to migrate to wells outside the affected area, use of state Superfund money is limited to response actions for the affected wells. The proposal for new wells can be implemented relatively quickly, allowing affected residents to discontinue their use of bottled water.

Hunting provided comments on the proposed plan, as well as comments on future investigation and cleanup activities related to the company's property. Hunting's comments on the proposed plan and the MPCA staff's response are addressed in detail below. The company's comments on the other issues are addressed in the final section of this responsiveness summary.

Comment: Generally, Hunting's concerns related to the proposal were:

- the comment period was too short;
- the decision should be delayed until after the township conducted a nitrate study on all Lansing wells. (The study would be an attempt to provide additional justification for grant funding of a municipal system.)
- a municipal system was the best option, with "mixed funding" financing (funding from Superfund, the township, the company and grants)

MPCA Response: MPCA staff believe that the comment period was of adequate length and note that Hunting was provided with a copy of the Focused Feasibility Study Final Report in December 1988, well in advance of the comment period, giving them more than sufficient time to review it.

Because some of the wells in Lansing are deep wells, not usually affected by nitrates, the results of a study may not provide any additional justification for award of a grant and would delay implementing a solution for the affected residents.

MPCA Comment: "Mixed funding" is not an option in Minnesota's Superfund program. Under the Superfund law, the MPCA could recover any Superfund money expended from responsible parties.

In addition to these concerns, in its March 8, 1989, comment letter, Huntting proposed a different alternative for a long-term water supply. Under the Huntting proposal, the company would implement source control (methods to control the source of the contamination) and replace only one residential well (the well closest to the Huntting property), which currently contains contaminants at levels exceeding the Recommended Allowable Limits (RALs). The remaining wells in the IRA would not be replaced unless monitoring indicated that contaminant levels exceeded an individual RAL.

(RALs are drinking water guidelines established by the Minnesota Department of Health. Drinking water advisories are based on a contaminant level exceeding an individual RAL or on the presence of multiple contaminants -- i.e., multiple pesticides detected would equal an RAL exceedance. However, in the Huntting proposal, exceeding RALs was proposed as the only action level.)

A more detailed analysis of the Huntting proposal follows. In evaluating the proposal, the MPCA used the eight criteria that were used to evaluate the other long-term water supply alternatives considered.

Short-term and Long-term Effectiveness: Huntting's proposal does not compare favorably based on its effectiveness over the short or long term. Pesticides, although moving with the ground water, will be in the IRA for a long time. The MPCA staff's Limited Remedial Investigation (LRI) Final Report indicated that the ground water flows at a speed of 25 to 60 feet per year. Currently, measures to control the source of the contamination are not in place, and pesticides at levels exceeding the RALs have again been measured in the Huntting wells. Assuming source control measures were put into place, the travel time of contaminated ground water from a potential source area on Huntting's property through the IRA, for example, would be in the 13 to 32 year range. Because of this range of time, each well in the IRA which has not been replaced has a high

potential of exceeding RALs over the short and long term. The only way to determine if the wells not replaced were safe for drinking would be to monitor each well -- at least on a quarterly basis -- during the entire ground water migration period.

Reduction of toxicity, mobility or volume: As with all other water supply replacement programs, the Huntting proposal would not reduce the toxicity, mobility or volume of pesticides in the aquifer beneath the IRA.

Implementability (technical feasibility, administrative feasibility, and availability of materials and services): The Huntting proposal is technically feasible. The new well could be constructed since all materials and engineering are available.

However, the proposal is not administratively feasible. Under Huntting's proposal, only wells with contaminant levels above RALs would be replaced. Exposure to multiple pesticides below RALs was one of the reasons that the Minnesota Department of Health issued drinking water advisories to residents. By not replacing the multiple-pesticide wells, the residents would be receiving unacceptable exposure, according to the Department of Health.

The time for implementing source control to minimize the impacts to the drinking water system is unknown, and, as such, is unacceptable. In addition, the reliability of the sampling program to protect human health is also unknown, in terms of number of samples to be taken and parameters to be analyzed, which is also unacceptable.

Cost: The cost of installing a single well is proportionately lower than installing seven wells (1/7 of \$155,000 = \$22,000). However, this cost does not take into account monitoring costs over the migration period or the cost of providing bottled water in the interim until drinking water advisories can be lifted. If the costs of additional bottled water and monitoring are added, the cost of this proposal would likely be comparable to the MPCA staff's selected alternative. In addition, the costs could potentially exceed those of the MPCA staff's selected alternative if all seven wells need replacing, one at a time, over 20 years and bottled water is required while evidence (sampling results) to lift the drinking water advisories is being collected.

Compliance with health and environmental regulations: Huntting did not provide a specific design for the replacement well so that the MPCA staff could determine whether the well would be in compliance with water well design and construction requirements. In addition, the proposal does not assure compliance with RALs in the existing shallow wells between sampling events, and the company did not propose a sampling frequency. Because of these factors, the proposal is unfavorable in comparison to the other alternatives considered by the MPCA staff.

Overall Protection of Human Health and the Environment: Protection of human health and the environment is not provided by the Huntting proposal. The wells in the IRA have received drinking water advisories and, currently, the evidence base does not exist which would allow these health-based drinking water advisories to be lifted.

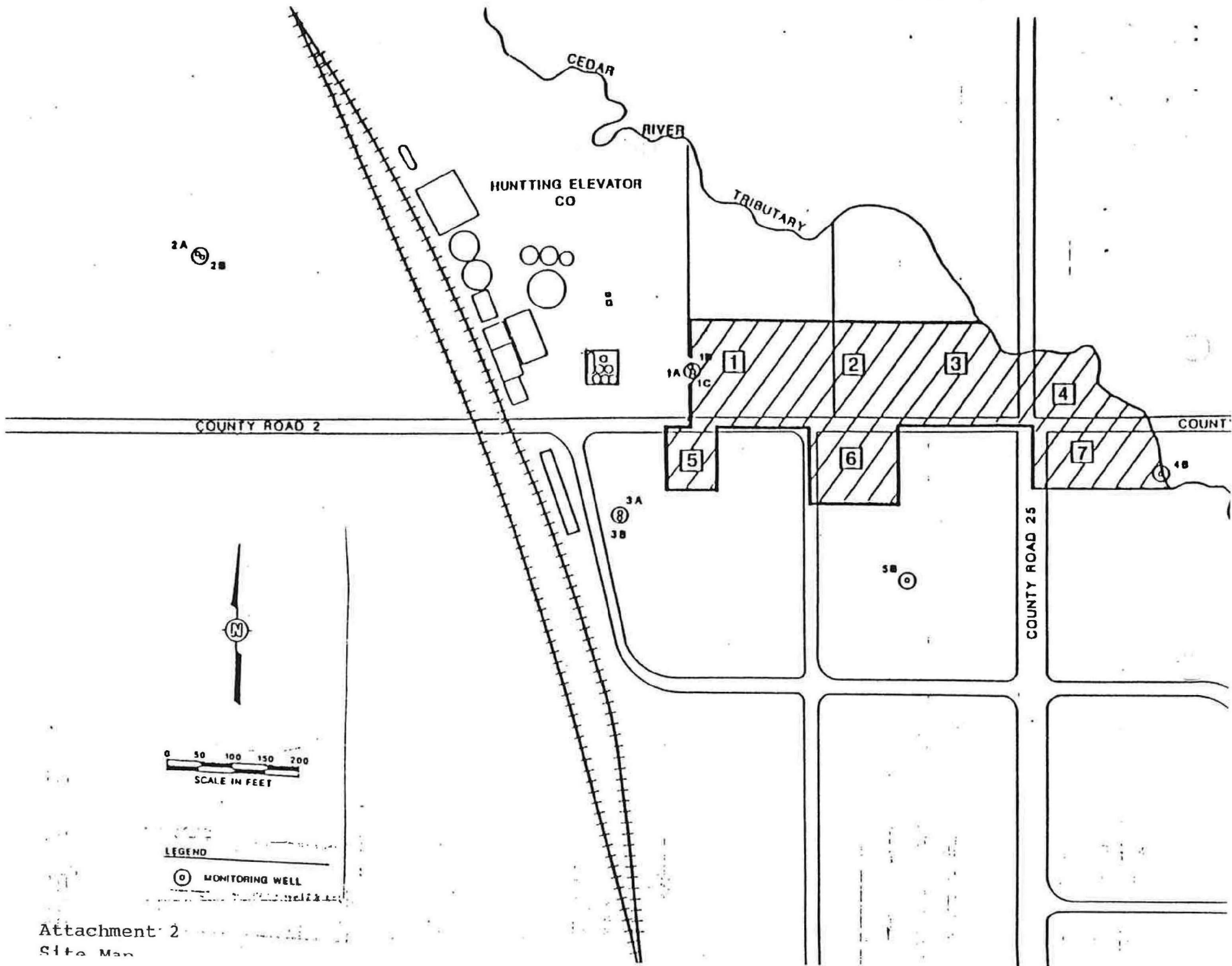
Community Acceptance: The MPCA staff would not expect community acceptance of this alternative, based on the comments received from residents during the proposed plan public comment period.

Based on this evaluation, Huntting's proposal compares unfavorably to the other water supply alternatives considered in the Focused Feasibility Study.

D. REMAINING ISSUES

One remaining issue relates to the funding source for the new wells. The MPCA staff will recommend that the Board issue a Request for Response Action (RFRA) to Huntting. The RFRA would formally identify the company as a responsible party, and require it to take specified cleanup actions, including installation of the wells. If Huntting fails to install the wells as requested under the RFRA, the MPCA may also use state Superfund money for this activity.

Several comments made by Huntting questioned the need for further investigation and cleanup of contamination on the company's property and the extent of long-term monitoring necessary. These are issues that are not part of the proposed plan for a long-term water supply and will be addressed under the requirements of the RFRA.



Attachment 2
Site Map



LAND OF QUALITY FOODS
OFFICE OF THE COMMISSIONER

90 W. PLATO BOULEVARD
SAINT PAUL, MN 55107

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

June 24, 1987

I, Jim Nichols, Commissioner of the Minnesota Department of Agriculture, designate employees of the Minnesota Pollution Control Agency as my agents for purposes of assisting in the administration of the provisions of Minn. Stat. § 18A.3(2), subd. 1 (1986) and Minn. Stat. § 18B.18 (Supp. 1987). This authority shall be concurrent with that of employees of the Minnesota Department of Agriculture.

MINNESOTA DEPARTMENT OF AGRICULTURE


Jim Nichols, Commissioner



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AN EQUAL OPPORTUNITY EMPLOYER

1358.0071



LAND OF QUALITY FOODS

90 W. PLATO BOULEVARD
SAINT PAUL, MN 55107

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

I, Jim Nichols, Commissioner of the Minnesota Department of Agriculture, designate employees of the Minnesota Pollution Control Agency as my agents for purposes of the implementation and administration of the provisions of Minn. Stat. chapter 18B (1988) at the Lansing site in Lansing, Minnesota. This authority shall be concurrent with that of employees of the Minnesota Department of Agriculture.

MINNESOTA DEPARTMENT OF AGRICULTURE

Patricia A Jensen

Deputy, Commissioner

RECEIVED

APR 13 1989

ATTORNEY GENERAL'S OFFICE
SUITE 200
520 LAFAYETTE ROAD
ST. PAUL, MN 55155



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AN EQUAL OPPORTUNITY EMPLOYER

1358.0073

DEPARTMENT : ATTORNEY GENERAL/EPD

STATE OF MINNESOTA

Office Memorandum

DATE : 4/14/89

TO : DAVID DOUGLAS
Site Response Section
Division of Ground Water and Solid WasteFROM : ANN M. SEHA *Seha*
Special Assistant Attorney General

PHONE : 6-7703

SUBJECT : Lansing Site - Huntting Elevator Company's Response to the
Commissioner's Notice

You asked me to respond to Huntting Elevator Company's (Huntting's) assertion that the Minnesota Pollution Control Agency's (MPCA's) staff did not properly conduct the Limited Remedial Investigation (LRI) and Focused Feasibility Study (FFS) under the requirements of the Minnesota Environmental Response and Liability Act (MERLA), Minn. Stat. ch. 115B (1988). Huntting's assertion is that the MPCA staff acted improperly by asking Malcolm Pirnie, Inc. (Malcolm Pirnie) to prepare its plan for the LRI/FFS on September 10, 1987, prior to receipt of Huntting's letter of September 28, 1987. Because this memorandum is being prepared as an attachment to the board item seeking issuance of a Request for Response Action to Huntting, I refer the MPCA Board to the chronology of events regarding the Lansing site and will not repeat those facts in detail here.

The MPCA staff acted properly under both Minn. Stat. § 115B.17, subd. 1(b) and Minn. Stat. § 115.17, subd. 2 in conducting its LRI/FFS of the Lansing site. These statutes are set forth in the board item; I refer the MPCA Board to the board item to read these statutes in full. The sentence at issue in section 115B.17, subdivision 1(b) provides that when the Commissioner of the MPCA declares an emergency, the Commissioner shall make reasonable efforts in light of the emergency to follow the procedure set forth in Minn. Stat. § 115.17, subd. 1(a) "before taking any action." The procedures in section 115B.17, subdivision 1(a) require the MPCA to "request any responsible party known to the agency" to take the actions needed and to determine that the responsible party will not take action in the manner and time requested.

As recited in the board item, the MPCA staff asked Huntting to supply bottled water to the affected Lansing residents on March 12, 1987; Huntting refused on March 16, 1987. In order to access the environmental response, compensation and compliance fund (fund), for money to supply bottled water to the Lansing residents to whom the Department of Health had issued advisories, the Commissioner declared an emergency on March 18, 1987. By the

time the emergency was declared, Huntting had been asked, and refused, to supply the bottled water. The MPCA began supplying bottled water on March 20, 1987.

The Declaration of Emergency also provided for conduct of an LRI/FFS. The purpose of an LRI in drinking water emergencies is to define the extent of the release of hazardous substances, identify the type and source of the release, and identify the effects of the release on public health, welfare and the environment. The purpose of an FFS is to evaluate alternatives for a long-term drinking water supply to replace the supply which has been contaminated. An FFS rarely focuses on any other type of response action that may also be required at a site. The Declaration of Emergency therefore provided for the investigation needed to resolve the drinking water problem which precipitated the emergency at Lansing.

The MPCA staff, as explained in the board item, assigned Malcolm Pirnie to the Lansing site on March 25, 1987 and asked for a work plan for how Malcolm Pirnie would prepare a detailed plan to conduct an LRI/FFS. It was not until September 10, 1987, after months of dispute with Huntting over access to the Huntting property and the scope of investigation, that the MPCA staff asked Malcolm Pirnie to plan the actual LRI/FFS. Shortly thereafter, on September 28, 1987, the MPCA staff received the next inadequate investigation proposal from Huntting and responded to that proposal as outlined in the board item. It was not until April of 1988 that the MPCA staff acted to conduct the actual LRI/FFS investigation. Huntting was given sufficient opportunity to respond to the MPCA's request for investigation and did not do so in an acceptable manner. The MPCA staff properly began the LRI/FFS in April 1988.

Additionally, Section 115B.17, subd. 1(b) only requires the MPCA staff to request action from a responsible party known to the MPCA staff before "taking any action". At the time the MPCA staff determined to commence the LRI/FFS, it suspected Huntting was a source of the pesticide contamination, but did not know that Huntting was a source until it could investigate the Lansing site. Huntting had denied the MPCA staff access to its property to investigate and denied that it was responsible for contamination. Without investigation, the MPCA staff did not know that Huntting was the source and therefore Huntting was not known to be a responsible party. As a result, the MPCA staff did not need to request Huntting to do anything. Huntting's statement that MPCA staff had to request action from any party it "contends" is a responsible party misstates the law.

Finally, the MPCA staff's LRI/FFS was also clearly authorized by section 115B.17, subd. 2. That statute provides that when the Commissioner of the MPCA has reason to believe that a release of a hazardous substance has occurred, the Commissioner may undertake investigations, monitoring, surveys and testing to determine the existence and extent of the release, the source and nature of the substance released, and the extent of danger to the public health, welfare or the environment. The MPCA staff may investigate under this statute without making any request of a responsible party.

AMS:jl

MINNESOTA POLLUTION CONTROL AGENCY

Route to:
(1) File
(2) _____
(3) _____
(4) _____

OFFICE MEMORANDUM

File: Lansing

Location: MPCA/St. Paul
(City, Village, Township, Section, Range, County, etc.)

Subject: Clean Water Supply

By Whom: DND Douglas Date: 3/12/87

Investigation Conference Office Field Hearing Meeting Phone

- Items to be Covered:
- (1) Those present and/or those interviewed
 - (2) Situation
 - (3) Further action, follow-up, recommendations

- (1) DND, Jim Huntlin
- (2) I asked Mr. Huntlin if his company would volunteer to supply bottled water to the Lansing residents with drinking water advisories. He said he would talk to his manager at Lansing and respond to the request next week.
- (3) Wait for response.

1020043

MINNESOTA POLLUTION CONTROL AGENCY

Route to:
(1) file
(2) _____
(3) _____
(4) _____

OFFICE MEMORANDUM

File: Lansing

Location: MPCA / St. Paul
(City, Village, Township, Section, Range, County, etc.)

Subject: Call To Jim Hunting

By Whom: DNDongas Date: 3/16/87

Investigation Conference Office Field Hearing Meeting Phone

Items to be Covered: (1) Those present and/or those interviewed
(2) Situation
(3) Further action, follow-up, recommendations

(1) DND, Jim Hunting, Scott Peters, attorney
(2) I called Mr. Hunting to find out whether he had made a decision about providing drinking water at Lansing. He said he wanted to call his attorney, call me. Scott Peters called and said he was representing Hunting in this matter and said that he was advising his client not to supply water. Mr. Peters requested a copy of our file. His address is Mr. Scott Peters
2200 First Banks Place East
Minneapolis, Minnesota 55402
Tele. No.: 343-7924.
Dorse and Whitney

1020068

Exhibit A

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

I. INTRODUCTION

Part II.A. and B. of the Request for Response Action (RFRA) to which this Exhibit is appended, requires Huntting to conduct a Remedial Investigation and Feasibility Study (RI/FS) at the Huntting Site. This Exhibit sets forth the requirements for completing the RI/FS and is appended to and made an integral and enforceable part of the RFRA.

Unless otherwise explicitly stated, the definitions provided in Minn. Stat. chs. 18B, 115, 115B and 116 shall control the meaning of the terms used in this RFRA.

MDA Commissioner: Means the Commissioner of the Minnesota Department of Agriculture or his/her authorized representative.

MPCA Commissioner: Means the Commissioner of the Minnesota Pollution Control Agency or his/her authorized representative.

Lead State Agency: The MPCA shall be designated the Lead State Agency for purposes of this RFRA. The Lead State Agency shall consult with the other State agency regarding the review and approval of submittals. In the event of a dispute between the MDA and MPCA regarding the review and approval of Submittals, the Lead State Agency shall make the final determination. The Lead State Agency may be changed upon written agreement between the MPCA and the MDA.

Commissioner: Means the Commissioner of the Lead State Agency.

II. PREPARATION AND REVIEW OF SUBMITTALS

Huntting shall submit to the Commissioner all reports, work plans, well placement and construction plans, quality control plans, and other submittals required by this Exhibit. The site safety and security plans described in Part IV do not require Commissioner approval. All other plans submitted require

Commissioner approval before implementation. Review and modification of the evaluation report described in Part V, Task A.1. shall be governed by the provision of Part V, Task A., below.

III. RETAIN CONSULTANT

Within fourteen (14) days of the effective date of the RFRA, Huntting shall retain a consultant(s) qualified to undertake and complete the requirements of this Exhibit and shall notify the Project Manager of the name of that consultant(s).

IV. SITE SECURITY AND SAFETY PLANS

Huntting shall prepare and submit to the Commissioner for comment (1) a Huntting Site security plan to limit and control the general public's access to the Huntting Site and (2) a Huntting Site safety plan to protect the health and safety of personnel involved in the RI/FS.

The Huntting Site security and safety plans shall be submitted to the Commissioner within thirty (30) days of the effective date of the RFRA. At a minimum, the Huntting Site safety plan shall incorporate and be consistent with the requirements of:

1. OSHA requirements 29 CFR Part 1910.120, Hazardous Waste Operations and Emergency Response; Interim Final Rule. Federal Register, December 19, 1986.
2. OSHA requirements 29 CFR Part 1910 (General Industry Standards) and 1926 (Construction Industry Standards).
3. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH/OSHA/USCG/EPA, DHHS (NIOSH) Publication Number 85-115, October 1985.

Huntting Site security and safety are the responsibility of Huntting. The Commissioner may comment on the Huntting Site security and safety plans but will neither approve nor disapprove those plans.

Within sixty (60) days of the effective date of the RFRA, Huntting shall implement the Huntting Site security and safety plan, taking into account the comments of the Commissioner, if any.

V. REMEDIAL INVESTIGATION

Huntting shall design and implement a Remedial Investigation (RI) which accomplishes the purposes and meets the requirements of this Part. The purposes of the RI are: (1) to identify all sources of contamination; (2) to identify the extent and magnitude of soil, subsoil, and ground water contamination; and (3) to provide information and data needed for the selection and implementation of response actions at the Huntting Site. The requirements of the RI are set forth in the Tasks below. Huntting shall identify and propose methods in the monthly reports for any necessary additional RI activities not included in the RI Work Plan as approved and shall describe in the monthly reports the impact of the additional RI activities or the list of possible alternate response actions derived pursuant to Task A.2. below. If any additional RI activities will adversely affect work scheduled through the end of the upcoming month or will require significant revisions to the RI Work Plan as approved, the Project Manager shall be notified immediately of the situation followed by a written explanation within ten (10) days of the initial notification.

Task A. Submit an Evaluation Report, List of Possible Alternative Response Actions, Proposed Remedial Investigation Work Plan and Quality Assurance Project Plan

Within forty-five (45) days of the effective date of there RFRA, Huntting shall submit for the Commissioner review and approval, modification or rejection an Evaluation Report, a List of Possible Alternative Response Actions, a Proposed Remedial Investigation Work Plan (RI Work Plan) and a Quality Assurance Project Plan (QAPP).

The Evaluation Report shall contain the information set forth in Task A.1. below. If the Evaluation Report does not meet the requirements of Task A.1. below, the Commissioner will return it within ten (10) days for modification by Huntting. Huntting shall within ten (10) days of receipt of the Commissioner comments, resubmit the modified Evaluation Report.

The List of Possible Alternative Response Actions and the Proposed RI Work Plan shall contain the information set forth in Task A.2. and 3. below. The QAPP shall contain the information set forth in Task A.4. below. The List of Possible Alternative Response Actions, the proposed RI Work Plan and QAPP shall be reviewed and approved, modified, or rejected by the Commissioner.

1. Evaluation Report

a. Site Background

The Evaluation Report shall include a detailed explanation of the operational history, location, pertinent area boundary features, general physiography, hydrology, stratigraphy, and geology of the Huntting Site. In addition, the Evaluation Report shall include a detailed discussion of all past activities related to the release or threatened release and disposal of pesticides at the Huntting Site.

b. Topographic Survey

The Evaluation Report shall include one (1) Huntting Site map using a one inch = 50 feet scale and a two (2) foot contour interval.

Surface water features, buildings, process areas, storage tanks, well locations, forested areas, utilities, paved areas, easements, right-of-ways, pipelines (surface and subsurface) and impoundment shall be shown. The maps shall be of sufficient details and accuracy to locate all current or proposed future work at the Huntting Site.

c. History of Remedial or Removal Actions

The Evaluation Report shall include a summary of any previous response actions conducted at the Hunting Site. This summary shall include field inspections, sampling surveys, cleanup activities, or other technical investigations as well as any removal or remedial action taken at the Hunting Site.

2. List of Possible Alternative Response Actions

Hunting shall submit a complete list of alternative response actions which are technically feasible and, upon implementation, would abate or minimize the release or threatened release at the Hunting Site. This list shall also contain general information regarding the nature and applicability of the identified possible alternative response actions. This list is intended to serve as a reference for Hunting and the Commissioner to design a comprehensive RI Work Plan.

3. Proposed Remedial Investigation Work Plan

Hunting shall submit a proposed RI Work Plan which, upon implementation: (1) will provide for the complete characterization of the Hunting Site and its actual or potential hazard to public health, welfare and the environment; (2) will produce sufficient data and information to allow Hunting to submit the report described in Task C, below; and (3) will produce data of sufficient quantity and adequate technical content to assess the possible alternative response actions during the Feasibility Study.

At a minimum, Hunting shall submit a proposed RI Work Plan which shall include proposed methodologies to accomplish the following RI activities and shall also include a proposed schedule for initiation and completion of the RI. The RI Work Plan shall contain the following:

a. Pesticide Characterization Plan

Huntting shall propose a plan to identify any pesticides that have been stored, used, or disposed of at the Huntting Site.

b. Source Investigation Plan

Huntting shall propose a plan which shall be used to define all areas and facilities (i.e., fertilizer and pesticide mixing, blending, tank filling, rinsing, waste storage, and disposal facilities) which release or threaten the release of pesticides to soil or ground water. The Source Investigation Plan shall include employee interviews, reviews of Huntting's records, on-site investigation and aerial photograph investigations.

c. Hydrologic Investigation Plan

Huntting shall propose a plan to characterize ground water flow and contaminant transport in the area of the Huntting Site. Ground water flow patterns and directions, both horizontal and vertical, must be defined. Contaminant concentrations and their variations must be defined.

The proposed Hydrologic Investigation Plan shall include the following:

(1) Proposal for the installation of ground water monitoring wells or piezometers which shall be needed to clearly define ground water flow conditions. The elevations of all wells at the Huntting Site shall be surveyed to a common reference point. Water elevations in all wells shall be measured.

(2) Proposal for the installation of ground water monitoring wells which shall be used to define conditions upgradient and downgradient of suspected source areas.

(3) Proposal for tests to be conducted which shall be performed to determine the hydraulic properties of the water bearing formations near and under the Hunting Site. Estimates shall be made of the ground water flow directions and rates in the horizontal and vertical directions.

(4) Proposal for a ground water quality monitoring program to be conducted which shall have a minimum frequency of monthly sampling for ground water quality and water levels. After initial pesticide sampling and analysis, Hunting may propose a reduced list of parameters for further monitoring.

d. Soils Investigation

The sources contributing to ground water contamination at the Hunting Site are contaminating or have contaminated soils in the unsaturated zone between the land surface and the water table. Soil sampling including split spoon sampling, test trenching or other methods shall be proposed to obtain soil samples for analyses. The soil samples shall be analyzed for pesticides. The soil sampling program shall be conducted in areas of known or suspected disposal or in areas where ground water contamination exists and no known or suspected source has been identified.

4. Quality Assurance Project Plan (QAPP)

Hunting shall submit a proposed QAPP specific to the Hunting Site to be utilized in implementing the RI Work Plan. The proposed QAPP shall be consistent with the requirements of the U.S. Environmental Protection Agency's Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (QAMS-005/80). The proposed QAPP shall consist of three parts: Specific Project Information; the Site Sampling Plan; and the Laboratory Quality Assurance/Quality (QA/QC) Control Plan. The Commissioner will review the QAPP and approve, modify or disapprove the Specific Project Information and the Site

Sampling Plan. Laboratory QA/QC are the responsibility of Huntting. The Commissioner will review and comment, but will not approve or disapprove the Laboratory QA/QC Plan. The QAPP shall include the following:

a. Specific Project Information

- (1) Title Page and Table of Contents;
- (2) Project Description: a general description of the project including anticipated start and completion dates for field work and sample analysis, intended use of data and location and description of sampling points; and
- (3) Project Organization and Responsibility: a table or chart of the project organization and line authority including those responsible for sampling, analysis and Quality Assurance/Quality Control (QA/QC).

b. Site Sampling Plan

The Site Sampling Plan shall be specific to the Huntting Site and shall consist of the following sections:

- (1) QA objectives for measurements of data in terms of detection limits, precision, accuracy, completeness, representativeness, comparability, and the EPA or standard method numbers; and
- (2) Sampling procedures including a description of the following: criteria for sampling site location, monitoring well installation method and procedures for sample collection, sample container identification, chain-of-custody, transport, storage and decontamination.

c. Laboratory QA/QC Plan

The laboratory QA/QC Plan shall consist of the following sections:

- (1) Identification of laboratories performing analysis;
- (2) Delineation of analytical turnaround time;

- (3) Sample custody;
- (4) Calibration procedures and frequency;
- (5) Description of analytical procedures;
- (6) Data reduction, validation and reporting;
- (7) Internal quality control checks;
- (8) Performance and system audits;
- (9) Preventive maintenance;
- (10) Specific procedures for routine assessment of data precision, accuracy and completeness;
- (11) Corrective action; and
- (12) Quality assurance reports to management.

Task B. Conduct Remedial Investigation

Within thirty (30) days of notification of the Commissioner's approval or modification of the List of Possible Alternative Response Actions, the RI Work Plan and the QAPP, Huntting shall initiate the RI. Huntting shall conduct the RI in accordance with the methods and time schedules set forth in the RI Work Plan and QAPP as approved or modified by the Commissioner. The RI shall be conducted in accordance with all Federal, State and local laws, rules, regulations and ordinances including but not limited to Minn. Rules Part 4725.0100 - 4775.7600 for the installation of any ground water monitoring wells.

Task C. Report Results of Remedial Investigation

Within one hundred and twenty (120) days of notification of the Commissioner's approval or modification of the RI Work Plan and QAPP, made pursuant to Part V, Task B, above, Huntting shall prepare and submit to the Commissioner a report (RI Final Report) detailing the data and results of the RI for the Huntting Site. The RI Final Report shall organize and present all data,

analytical results, boring logs and test results. Further, the RI Final Report shall include a detailed description of the following:

1. Nature and Extent of the Release or Threatened Release

Hunting shall include in the RI Final Report a description of the following:

- a. The type, physical states and amounts of pesticides at the Hunting Site;
- b. Any medium (e.g., ground water, surface water, soils, air) affected by the pesticides at the Hunting Site;
- c. The pathways (e.g., leachate, multi-aquifer wells, run-off) by which contamination reached the media;
- d. The extent and magnitude of pesticides contamination in the soil on the Hunting Site;
- e. The extent and magnitude of pesticides contamination in the ground water beneath and around the Hunting Site;
- f. The impact of any ground water contamination identified at the Hunting Site; and
- g. Any human or environmental exposure within a 1000 feet radius of each identifiable source of contamination.

2. Analysis of Data in Relation to Possible Alternative Response Actions

Hunting shall include in the RI Final Report the list of possible alternative response actions identified pursuant to Part V, Task A.2. as approved or modified by the Commissioner and shall include an analysis as to whether the RI has produced sufficient information to allow for a detailed analysis during the Feasibility Study of each possible alternative response action.

Task D. Approval of the RI Final Report

The Commissioner shall review and approve, modify, or reject the RI Final Report. The Commissioner shall notify Huntting of final approval or modification of the RI Final Report.

If the Commissioner rejects the RI Final Report, the Commissioner shall specify the deficiencies and reasons for the rejection. Huntting shall correct the deficiencies, and resubmit the RI Final Report to the Commissioner within thirty (30) days of the MPCA Commissioner's notification of rejection.

VI. FEASIBILITY STUDY

The purpose of the Feasibility Study (FS) is to evaluate the feasibility and effectiveness of implementing alternative Response Actions at the Huntting Site. Huntting shall conduct the FS in accordance with the National Oil and Hazardous Substance Contingency Plan, 40 CFR Part 300, 300.68 (f.), (g.), (h.), and (i.). The FS shall contain sufficient information and analysis for the MPCA Commissioner to make the determination of the appropriate extent of remedy as specified in 40 CFR 300.68 (j.). The FS shall use and build upon the information generated by the RI and shall consist of the following Tasks.

Task A. Alternatives Report

Within thirty (30) days of notification of the Commissioner's acceptance of the RI Final Report made pursuant to Task D above, Huntting shall develop and submit to the Commissioner an Alternatives Report. The Alternatives Report shall provide an evaluation of (a) each of the possible alternative response actions identified in Task A.2., except for those alternatives which have been specifically rejected by the Commissioner and (b) any other alternative identified by the Huntting or the Commissioner.

The purpose of preparing an Alternatives Report is to provide sufficient information on each of the possible alternative response actions to enable the

Commissioner to reject any possible alternate response actions which are clearly not feasible or effective. (The alternative response actions to be evaluated in the Alternatives Report and the Detailed Analysis Report are referred to below as the "evaluated alternatives.") For each evaluated alternative, the following shall be addressed and presented in the Alternatives Report:

1. Cost

A preliminary estimate of the capital, operation and maintenance costs associated with installing or implementing each evaluated alternative.

2. Environmental Effects

A general discussion of the expected adverse effects which each evaluated alternative may have on the environment.

3. Effectiveness

A preliminary analysis as to whether each evaluated alternative is likely to effectively abate or minimize the release or threatened release and/or minimize the threat of harm to the public health, welfare and the environment.

4. Technical Feasibility and Implementability

A preliminary analysis of the technical feasibility and implementability of each evaluated alternative both in relation to the location and conditions of the release or threatened release and in relation to the reliability of the technologies which could be employed to implement the evaluated alternative.

5. Identification of Technologies

An explanation of the various technologies which may be employed to implement each of the evaluated alternatives and a summary of the effectiveness, reliability, past success and availability of each specified technology.

Huntting shall include in the Alternatives Report their recommendation and rationale regarding which evaluated alternatives should not be given further consideration for implementation at the Huntting Site. Huntting shall base its recommendation on the extent to which each of the evaluated alternatives meets each of the three response action objectives and four criteria set forth in Task B below.

Task B. Review of Evaluated Alternatives

Upon receipt of the Alternatives Report submitted pursuant to Task A, above, the Commissioner will review the evaluated alternatives and will reject any of the evaluated alternatives that are clearly not feasible or effective. The Commissioner will notify Huntting of the results of the Commissioner's review within thirty (30) days of receipt of the Alternatives Report.

The purpose of implementing any response action at the Huntting Site is to meet the following objectives: (1) to protect the public health, welfare and the environment; (2) to meet the requirements of 300.68 of the National Oil and Hazardous Substances Contingency Plan; and (3) to meet the requirements of any other applicable Federal or State laws.

In determining whether to reject an evaluated alternative, the Commissioner will consider the extent to which each of the evaluated alternatives meets each of the objectives stated above and will use the following criteria:

1. Cost

Evaluated alternatives whose estimated costs far exceed those of other evaluated alternatives in relation to the benefits which the evaluated alternatives will produce will be eliminated, unless Huntting explicitly desires to further consider the evaluated alternative.

2. Environmental Effects

Evaluated alternatives that inherently present significant adverse environmental effects will be excluded from further consideration.

3. Effectiveness

Evaluated alternatives that do not satisfy the response action objectives and do not contribute significantly to the protection of public health, welfare or the environment will be rejected. On-site pesticide control alternatives must achieve adequate control of the pesticide in terms of abating or minimizing the release or threatened release. Off-site alternatives must minimize or mitigate the threat of harm to public health, welfare or the environment, or they will be excluded from further consideration.

4. Technical Feasibility and Implementability

Evaluated alternatives that may prove extremely difficult to implement, or that rely on unproven technologies will generally be excluded from further consideration. Evaluated alternatives that are not reliable will be excluded from further consideration.

Task C. Detailed Analysis Report

Within thirty (30) days of the Commissioner's notification of review of the Alternatives Report made pursuant to Task B above, Hunting shall prepare and submit a Detailed Analysis Report to the Commissioner on all the evaluated alternatives not rejected by the Commissioner. The Detailed Analysis Report shall present the following elements for the remaining evaluated alternatives (i.e., evaluated alternatives that are not rejected).

1. Detailed Description

At a minimum, a detailed description shall include for each remaining evaluated alternative:

- a. A description of the appropriate treatment and disposal technology for each remaining evaluated alternative;
- b. A description of the special engineering considerations required to implement each remaining evaluated alternative (e.g., for a pilot treatment facility, any additional studies that may be needed to proceed with final response action design);
- c. A description of operation, maintenance, and monitoring requirements for each remaining evaluated alternative;
- d. A description of off-site disposal needs and transportation plans for each remaining evaluated alternative;
- e. A description of temporary storage requirements for each remaining evaluated alternative;
- f. A description of safety requirements associated with implementing each remaining evaluated alternative, including both on-site and off-site health and safety considerations;
- g. A description of how any of the other remaining evaluated alternatives could be combined with this evaluated alternative and how any of the combinations could best be implemented to produce significant environmental improvements or cost savings; and
- h. A description/review of on-site or off-site treatment or disposal facilities for each remaining evaluated alternative which could be utilized to ensure compliance with applicable requirements of the Resource Conservation and Recovery Act, the MPCA hazardous waste rules, and the U.S. and Minnesota Departments of Transportation rules.

2. Environmental Assessment

At a minimum, an environmental assessment shall include an evaluation of the environmental effects, an analysis of measures to mitigate the adverse effects, the physical or legal constraints, and the compliance with Federal and State regulatory requirements for each remaining evaluated alternative.

3. Cost Analysis

A cost analysis shall include a detailed breakdown of the present value capital costs and annualized capital costs of implementing each remaining evaluated alternative (and each phase of each remaining evaluated alternative) as well as the present value annual operating and maintenance costs. The costs shall be presented as both a total cost and an equivalent annual cost.

4. Recommended Evaluated Alternative(s) and Conceptual Design

Hunting shall include in the Detailed Analysis Report its recommendation for which remaining evaluated alternative (or combination of remaining evaluated alternatives) should be installed or implemented at the Hunting Site. The purpose of preparing a conceptual design is to illustrate all aspects of the recommended evaluated alternative (or combination) in sufficient detail to enable the Commissioner to fully evaluate the recommended evaluated alternative (or combination). The conceptual design for the recommended evaluated alternative (or combination) shall include, but not be limited to, the elements listed below. Information which is to be included in the conceptual design, and which has been prepared earlier pursuant to other parts of this Exhibit, may be included by reference.

- A conceptual plan view drawing of the overall site, showing general locations for project actions and facilities.
- Conceptual layouts (plan and cross sectional views where required) for the individual facilities, other items to be installed, or actions to be implemented.
- Conceptual design criteria and rationale.

- A description of types of equipment required, including approximate capacity, size and materials of construction.
- Process flow sheets, including chemical consumption estimates and a description of the process.
- An operational description of process units or other facilities.
- A description of unique structural concepts for facilities.
- A description of operation and maintenance requirements.
- A discussion of potential construction problems.
- Right-of-way requirements.
- A description of technical requirements for environmental mitigation measures.
- Additional engineering data required to proceed with design.
- A discussion of permits that are required pursuant to environmental and other statutes, rules and regulations.
- Order-of-Magnitude implementation cost estimate.
- Order-of-Magnitude annual O&M cost estimates.
- Estimated implementation schedule.

Task D. Approval of Detailed Analysis Report

The Commissioner shall review and approve, modify, or reject the Detailed Analysis Report based on the objectives and criteria set out in Task B of this Part.

If the Commissioner approves or modifies the Detailed Analysis Report, the Commissioner shall so notify Huntting.

The Commissioner may reject the Detailed Analysis Report for either or both of the following two reasons: (1) inadequate performance of Tasks C.1., C.2. and/or C.3. and (2) presentation under Task C.4. of an unacceptable recommended evaluated alternative and/or conceptual design.

If the Commissioner rejects the Detailed Analysis Report, for reason (1) above, Huntting shall correct the deficiencies and submit a revised Detailed Analysis Report to the Commissioner within thirty (30) days after receiving a notice of rejection.

If the Commissioner rejects the Detailed Analysis Report for reason (2) above, Huntting shall recommend for review by the Commissioner another evaluated alternative and conceptual design and shall develop and submit its proposal to the Commissioner within thirty (30) days after receiving a notice of rejection.

The evaluated alternative (or combination of evaluated alternatives) approved by the Commissioner shall be implemented by Huntting pursuant to Exhibit B to the Order.

Exhibit B

RESPONSE ACTION PLAN AND RESPONSE ACTION IMPLEMENTATION

I. INTRODUCTION

Part II.C of the Request for Response Action (RFRA), to which this Exhibit is appended, requires Huntting to prepare a Response Action Plan (RAP) and implement Response Actions (RAs) at the Huntting Site. This Exhibit sets forth the requirements for preparing the RAP and implementing the RAs, which have been approved by the Commissioner of the Lead State Agency pursuant to Part VI, Task D of Exhibit A to the RFRA, and is appended to and made an integral and enforceable part of the RFRA.

Unless otherwise explicitly stated, the definitions provided in Minn. Stat. chs. 18B, 115, 115B and 116 shall control the meaning of the terms used in this RFRA.

MDA Commissioner: Means the Commissioner of the Minnesota Department of Agriculture or his/her authorized representative.

MPCA Commissioner: Means the Commissioner of the Minnesota Pollution Control Agency or his/her authorized representative.

Lead State Agency: The MPCA shall be designated the Lead State Agency for purposes of implementation of this RFRA. The Lead State Agency shall consult with the other State agency regarding the review and approval of submittals. In the event of a dispute between the MDA and MPCA regarding the review and approval of submittals, the Lead State shall make the final determination. The Lead State Agency may be changed upon written agreement between the MPCA and the MDA.

Commissioner: Means the Commissioner of the Lead State Agency.

II. PREPARATION AND REVIEW OF SUBMITTALS

Huntting shall submit to the Commissioner all reports, detailed plans and specifications, work plans, well placement and construction plans, quality assurance project plan, and other submittals required by this Exhibit. The review and approval, modification or rejection of all submittals shall be made by the Commissioner, except that the site safety and security plans described in Part IV of this Exhibit do not require Commissioner approval.

III. RETAIN CONSULTANT

Within fourteen (14) days of notification of approval of the Detailed Analysis Report by the Commissioner made pursuant to Part VI, Task D of Exhibit A to the Order, Huntting shall retain a consultant(s) qualified to undertake and complete the requirements of this Exhibit and shall notify the Project Manager(s) of the name of that consultant(s).

IV. SITE SECURITY AND SAFETY PLANS

Huntting shall prepare and submit to the Commissioner for comment (1) a Huntting Site security plan to limit and control the general public's access to the Huntting Site and (2) a Huntting Site safety plan to protect the health and safety of personnel involved in implementing the RAs.

The Huntting Site security and safety plans shall be submitted at the same time that the proposed RAP is submitted, pursuant to Part V, below. At a minimum, the Huntting Site safety plan shall incorporate and be consistent with the requirements of:

1. OSHA requirements 29 CFR Part 1910.120, Hazardous Waste Operations and Emergency Response; Interim Final Rule. Federal Register, December 19, 1986.
2. OSHA requirements 29 CFR Part 1910 (General Industry Standards) and 1926 (Construction Industry Standards).
3. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH/OSHA/USCG/EPA, DHHS (NIOSH) Publication Number 85-115, October 1985.

The site safety and security plans developed for Exhibit A shall be modified and submitted or submitted by reference for the site safety and security plans required by this Exhibit.

Huntting Site security and safety are the responsibility of Huntting. The Commissioner may comment on the Huntting Site security and safety plans but will neither approve nor disapprove those plans.

Huntting shall implement the Huntting Site security and safety plans, taking into account the comments of the Commissioner, if any, when it implements the RAs, pursuant to Part VI, below. Huntting shall ensure that no lapse in Huntting Site security or safety occurs in the time interval between completion of remedial investigation/feasibility study actions at the Huntting Site and the implementation of this Part IV.

V. RAP WORK PLAN

Within thirty (30) days of retaining a consultant pursuant to Part III above, Huntting shall prepare and submit to the Commissioner for review and approval, modification, or rejection a work plan (RAP Work Plan) for preparation of a RAP. The RAP Work Plan shall, at a minimum specify all of the work products which must be produced and subjects which must be addressed in the RAP in order to perform the response action(s) approved by the Commissioner pursuant to Part VI, Task D of Exhibit A to the Order. At a minimum, the RAP Work Plan shall include proposed methodologies and time schedules for all subjects which are listed in Part VI below. If the RAP Work Plan is rejected, Huntting shall correct the deficiencies and submit a revised RI Work Plan to the Commissioner within fourteen (14) days after receiving a notice of rejection.

VI. RESPONSE ACTION PLAN

Huntting shall prepare a proposed RAP which accomplishes the purposes and meets the requirements of this Part. The proposed RAP shall be prepared in

accordance with the methodologies and time schedules in the RAP Work Plan, as approved or modified by the Commissioner, and shall be submitted to the Commissioner for review and approval, modification or rejection within forty-five (45) days of the notice of approval or modification of the RAP Work Plan. The purpose of the RAP is to provide a detailed design of RA(s) which, upon implementation, will protect the public health, welfare, and the environment from the threatened or actual release of pesticides associated with the Huntting Site. The proposed RAP shall consist of the following three Tasks.

Task A. Remedial Design

As part of the proposed RAP, the Huntting shall submit a proposed remedial design for the Huntting Site for RA(s) approved by the Commissioner pursuant to Part VI, Task D of Exhibit A. The purpose of the remedial design is to specify detailed methods and time schedules for the approved RA(s) at the Huntting Site. The remedial design shall include, but not be limited to, construction plans and specifications, disposal methods, necessary permits, closure and postclosure plans, a plan to assess the effectiveness of remedial actions, contingency plans, etc.

Task B. Quality Assurance Project Plan (QAPP)

Huntting shall submit a proposed QAPP specific to the Huntting Site to be utilized in implementing the RI Work Plan. The components of this QAPP shall be the same as those listed in Part V, Task A.4 of Exhibit A. Exhibit A's QAPP shall be modified, if necessary, to implement specific requirements of this Exhibit and submitted or submitted by reference for the QAPP required by this Exhibit.

Task C. Response Action Monitoring Plan

As part of the proposed RAP, Huntting shall submit a proposed response action monitoring plan (Monitoring Plan) for the Huntting Site. The purpose of

the Monitoring Plan is to specify all short- and long-term monitoring of air, surface water, sludges, soils, and ground water, which is necessary to determine the status and effectiveness of the RA(s) to be implemented at and near the Hunting Site.

The Monitoring Plan shall, at a minimum, contain the following:

1. Analytical Parameter List

Hunting shall propose a list of parameters including water level measurements that shall be monitored and analyzed as part of the Monitoring Plan.

2. Monitoring Facility Location and Design

Hunting shall propose the design and location of all monitoring facilities including both on-site and off-site wells and surface water stations that shall be included in the Monitoring Plan.

3. Sampling Schedule

Hunting shall propose a sampling schedule for the parameters proposed in the Monitoring Plan for all monitoring locations.

4. Reporting Plan

Hunting shall propose a plan for reporting the results of long-term monitoring to the Lead State Agency under the other State Agency. The reporting plan shall, at a minimum, contain the following:

a. Quarterly Monitoring Reports

Hunting shall submit the analytical and water level results to the Project Manager by telephone within seven (7) days of receiving the laboratory results and to the Commissioner quarterly by the tenth day of each third month following the sampling for all analyses completed during the previous quarter.

b. Annual Monitoring Reports

Hunting shall submit an Annual Monitoring Report to the Commissioner on or before January 1, 1990 and each January 1 thereafter. The Annual Monitoring Report shall contain the following information:

- (1) The results of all water level measurements and parameter analyses for the previous year;
- (2) A water level contour map for both the shallow water bearing zone used as a water supply and surface water elevations if any;
- (3) A map showing each well with the concentration of pesticides for each sampling event;
- (4) Graphs illustrating the concentrations over time using data from each sampling event (this graph shall be cumulative showing water quality for all previous years as well as the reporting year); and
- (5) A sampling plan for the next year with an assessment of the monitoring parameters, sampling frequencies, and the need for the addition or deletion of monitoring wells.

VII. APPROVAL OF THE RAP

The Commissioner shall review and approve, modify or reject the proposed RAP which is submitted pursuant to Part VI above.

If the Commissioner approves or modifies the proposed RAP, the Commissioner shall so notify Hunting. If the Commissioner rejects the proposed RAP, the Commissioner shall notify Hunting and specify the deficiencies and reasons for rejection. Hunting shall correct the deficiencies and resubmit the proposed RAP to the Commissioner within fourteen (14) days of the notification of rejection.

VIII. RESPONSE ACTION IMPLEMENTATION

Huntting shall implement the RA(s) specified in the RAP as approved by the Commissioner pursuant to Part VII above in a manner which accomplishes the purposes and meets the requirements of this Part. The purpose of RA implementation is to take those actions which will protect the public health, welfare, and the environment from the threatened or actual release of pesticides associated with the Huntting Site. The requirements for RA implementation are set forth in the three tasks below.

Task A. Conduct RA(s)

Within thirty (30) days of receipt of the Commissioner's notification, pursuant to Part VII above, of approval or modification of the RAP, Huntting shall initiate implementation of the RA(s). Huntting shall implement the RA(s) in accordance with the methodologies and time schedules set forth in the RAP as approved or modified by the Commissioner.

The RA implementation shall be conducted in accordance with all Federal, State, and local laws, rules, regulations and ordinances.

Task B. Report Results of RA Implementation

Within thirty (30) days of the completion of the implementation of the RA(s) specified in the approved RAP, Huntting shall prepare and submit to the Commissioner a RA Final Report which includes the following:

1. The data and results of the RA implementation;
2. The follow-up actions, if any, which will be taken in the following one year period;
3. A certification that all work plans, specifications and schedules have been implemented and completed in accordance with the RAP as approved by the Commissioner; and

4. An identification of difficulties encountered during the RA implementation which may impair or otherwise reduce the effectiveness of the RA implementation to minimize or mitigate the release or threatened release of pesticides from the Hunting Site or which may require unanticipated operational or maintenance actions to maintain the effectiveness of any of the implemented RA(s).

Task C. Approval of the RA Final Report

The Commissioner shall review the RA Final Report submitted pursuant to Task B above, determine whether Hunting's obligations under this Exhibit have been satisfactorily completed, and notify Hunting. If the Commissioner determines that Hunting's obligations under this Exhibit have not been satisfactorily completed, Hunting shall correct any deficiencies and resubmit the RA Final Report within thirty (30) days of the notification of the Commissioner's determination.

Exhibit C

LONG-TERM WATER SUPPLY
RESPONSE ACTION PLAN AND RESPONSE ACTION IMPLEMENTATION
FOR THE IMPACTED RESIDENTIAL AREA

I. INTRODUCTION

Part II.D. of the Request for Response Action, to which this Exhibit is appended, requires Hunting to prepare a Long-Term Water Supply Response Action Plan (RAP) and implement long-term Response Actions (RAS) in the Impacted Residential Area (IRA). This Exhibit sets forth the requirements for preparing the RAP and implementing the RAS, which have been approved by the Commissioner pursuant to Part VI, Task D of Exhibit C to the RFRA, and is appended to and made an integral and enforceable part of the RFRA.

Unless otherwise explicitly stated, the definitions provided in Minn. Stat. chs. 18B, 115, 115B and 116 shall control the meaning of the terms used in this RFRA.

MDA Commissioner: Means the Commissioner of the Minnesota Department of Agriculture or his/her authorized representative.

Lead State Agency: The MPCA shall be designated the Lead State Agency for purposes of implementation of this RFRA. The Lead State Agency shall consult with the other State agency regarding the review and approval of submittals. In the event of a dispute between the MDA and MPCA regarding the review and approval of submittals, the Lead State Agency shall make the final determination. The Lead State Agency may be changed upon written agreement between the MPCA and the MDA.

Commissioner: Means the Commissioner of the Lead State Agency.

Impacted Residential Area: Means the residential area impacted by pesticide contamination of ground water, near the Huntting Site encompassing all residences whose wells have MDH drinking water advisories and any other residences whose wells receive MDH drinking water advisories due to releases from the Huntting Site during the term this RFRA is in effect.

II. PREPARATION AND REVIEW OF SUBMITTALS

Huntting shall submit to the Commissioner all reports, detail plans and specifications, work plans, well placement and construction plans, quality assurance project plan, and other submittals required by this Exhibit. The review and approval, modification or rejection of all submittals shall be made by the Commissioner, except that the site safety and security plans described in Part IV of this Exhibit do not require Commissioner approval.

III. RETAIN CONSULTANT

Within fourteen (14) days of the effective date of the RFRA, Huntting shall retain a consultant(s) qualified to undertake and complete the requirements of this Exhibit and shall notify the Project Manager of the name of that consultant(s).

IV. SITE SECURITY AND SAFETY PLANS

Huntting shall prepare and submit to the Commissioner for comment (1) an IRA security plan to limit and control the general public's access to the work zones of the IRA and (2) an IRA safety plan to protect the health and safety of personnel involved in implementing the IRAs.

The IRA security and safety plans shall be submitted at the same time that the proposed RAP is submitted, pursuant to Part V, below. At a minimum, the IRA plan shall incorporate and be consistent with the requirements of:

1. OSHA requirements 29 CFR Part 1910.120, Hazardous Waste Operations and Emergency Response; Interim Final Rule. Federal Register, December 19, 1986.
2. OSHA requirements 29 CFR Part 1910 (General Industry Standards) and 1926 (Construction Industry Standards).
3. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH/OSHA/USCG/EPA, DHHS (NIOSH) Publication Number 85-115, October 1985.

The site safety and security plans developed for Exhibit A shall be modified and submitted or submitted by reference for the site safety and security plans required by this Exhibit.

IRA security and safety are the responsibility of Huntting. The Commissioner may comment on the IRA security and safety plans but will neither approve nor disapprove those plans.

Huntting shall implement the IRA security and safety plans, taking into account the comments of the Commissioner, if any, when it implements the RAs, pursuant to Part VI, below. Huntting shall ensure that no lapse in IRA security or safety occurs in the time interval between completion of remedial investigation/feasibility study actions in the IRA and the implementation of this Part IV.

V. RAP WORK PLAN

Within fourteen (14) days of retaining a consultant pursuant to Part III above, Huntting shall prepare and submit to the Commissioner for review and approval, modification, or rejection a work plan (RAP Work Plan) for preparation of a RAP to implement the long-term water supply alternative approved by the MPCA and MDA. The RAP Work Plan shall, at a minimum specify all of the work products which must be produced and subjects which must be addressed in the RAP in order to perform the response action. At a minimum, the RAP Work Plan shall include proposed methodologies and time schedules for all subjects which are

listed in Part VI below. If the RAP Work Plan is rejected, Huntting shall correct the deficiencies and submit a revised RI Work Plan to the Commissioner within fourteen (14) days after receiving a notice of rejection.

VI. RESPONSE ACTION PLAN

Huntting shall prepare a proposed RAP which accomplishes the purposes and meets the requirements of this Part. The proposed RAP shall be prepared in accordance with the methodologies and time schedules in the RAP Work Plan, as approved or modified by the Commissioner, and shall be submitted to the Commissioner for review and approval, modification or rejection within thirty (30) days of the notice of approval or modification of the RAP Work Plan. The purpose of the RAP is to provide a detailed design of the selected RA as described in Part II.D. of the RFRA which, upon implementation, will provide a long-term water supply to the residents in the IRA. The proposed RAP shall consist of the following three tasks.

Task A. Remedial Design

As part of the proposed RAP, the Huntting shall submit a proposed remedial design for the approved alternative. The purpose of the remedial design is to specify detailed methods and time schedules implementing the deeper individual wells. The remedial design shall include, but not be limited to, construction plans and specifications, necessary permits, a plan to assess the effectiveness of remedial actions, contingency plans, etc.

Task B. Quality Assurance Project Plan (QAPP)

Huntting shall submit a proposed QAPP specific to the IRA to be utilized in implementing the RA Work Plan. The components of this QAPP shall be the same as those listed in Part V, Task A.4 of Exhibit A. Exhibit A's QAPP shall be modified, if necessary, to implement specific requirements of this Exhibit and submitted or submitted by reference for the QAPP required by this Exhibit.

Task C. Response Action Monitoring Plan

As part of the proposed RAP, Huntting shall submit a proposed response action monitoring plan (Monitoring Plan) for the IRA. The purpose of the Monitoring Plan is to specify all short- and long-term monitoring of ground water, which is necessary to determine the status and effectiveness of the RA to be implemented in and near the IRA.

The Monitoring Plan shall, at a minimum, contain the following:

1. Analytical Parameter List

Huntting shall propose a list of parameters including water level measurements that shall be monitored and analyzed as part of the Monitoring Plan.

2. Monitoring Facility Location and Design

Huntting shall propose the design and location of all monitoring facilities including monitoring wells and surface water stations that shall be included in the Monitoring Plan.

3. Sampling Schedule

Huntting shall propose a sampling schedule for the parameters proposed in the Monitoring Plan for all monitoring locations.

4. Reporting Plan

Huntting shall propose a plan for reporting the results of long-term monitoring to the Lead State Agency. The reporting plan shall, at a minimum, contain the following:

Annual Monitoring Reports

Huntting shall submit an Annual Monitoring Report to the Commissioner on or before January 1, 1990 and each January 1 thereafter. The Annual Monitoring Report shall contain the following information:

- (1) The results of all water level measurements and parameter analyses for the previous year;
- (2) A water level contour map for both the shallow water bearing zone used as a water supply and surface water elevations if any;
- (3) A map showing each well with the concentration of pesticides for each sampling event;
- (4) Graphs illustrating the concentrations over time using data from each sampling event (this graph shall be cumulative showing water quality for all previous years as well as the reporting year); and
- (5) A sampling plan for the next year with an assessment of the monitoring parameters; sampling frequencies, and the need for the addition or deletion of monitoring wells.

VII. APPROVAL OF THE RAP

The Commissioner shall review and approve, modify or reject the proposed RAP which is submitted pursuant to Part VI above.

If the Commissioner approves or modifies the proposed RAP, the Commissioner shall so notify Huntting. If the Commissioner rejects the proposed RAP, the Commissioner shall notify Huntting and specify the deficiencies and reasons for rejection. Huntting shall correct the deficiencies and resubmit the proposed RAP to the Commissioner within fourteen (14) days of the notification of rejection.

VIII. RESPONSE ACTION IMPLEMENTATION

Huntting shall implement the RA specified in the RAP as approved by the Commissioner pursuant to Part VII above in a manner which accomplishes the purposes and meets the requirements of this Part. The purpose of RA implementation is to provide a long-term water supply to the residents in the

IRA. The requirements for RA implementation are set forth in the three Tasks below.

Task A. Conduct RA

Within thirty (30) days of receipt of the Commissioner's notification, pursuant to Part VII above, of approval or modification of the RAP, Huntting shall initiate implementation of the RA. Huntting shall implement the RA in accordance with the methodologies and time schedules set forth in the RAP as approved or modified by the Commissioner.

The RA implementation shall be conducted in accordance with all Federal, State, and local laws, rules, regulations and ordinances.

Task B. Report Results of RA Implementation

Within thirty (30) days of the completion of the implementation of the RA specified in the approved RAP, Huntting shall prepare and submit to the Commissioner a RA Final Report which includes the following:

1. The data and results of the RA implementation;
2. The follow-up actions, if any, which will be taken in the following one year period;
3. A certification that all work plans, specifications and schedules have been implemented and completed in accordance with the RAP as approved by the Commissioner; and
4. An identification of difficulties encountered during the RA implementation which may impair or otherwise reduce the effectiveness of the RA implementation or which may require unanticipated operational or maintenance actions to maintain the effectiveness of any of the implemented RA(s).

Task C. Approval of the RA Final Report

The Commissioner shall review the RA Final Report submitted pursuant to Task B above, determine whether Huntting's obligations under this Exhibit have

been satisfactorily completed, and notify Huntting. If the Commissioner determines that Huntting's obligations under this Exhibit have not been satisfactorily completed, Huntting shall correct any deficiencies and resubmit the RA Final Report within thirty (30) days of the notification of the Commissioner's determination.