

STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Proposed  
Rules Governing the Management  
of Petroleum Contaminated Soil,  
Minnesota Rules, Ch. 7037 and  
Minnesota Rules pt. 7035.0300.

REPORT OF THE  
ADMINISTRATIVE LAW JUDGE

The above-entitled matter came on for hearing before Administrative Law Judge Allan W. Klein on January 13, 1993, in the Stearns County Courthouse, 705 Courthouse Square, St. Cloud, Minnesota.

This Report is part of a rulemaking proceeding held pursuant to Minn. Stat. §§ 14.131 to 14.20, to hear public comment, to determine whether the Minnesota Pollution Control Agency (MPCA) has fulfilled all relevant substantive and procedural requirements of law applicable to the adoption of the rules, whether the proposed rules are needed and reasonable and whether or not modifications to the rules proposed by the MPCA after initial publication are impermissible, substantial changes.

Ann Cohen, Special Assistant Attorney General, Suite 200, 520 Lafayette Road, St. Paul, Minnesota 55155, appeared on behalf of the MPCA. The MPCA's hearing panel consisted of Chris Zadak, from the Tanks and Spills Section of the MPCA.

Twenty-four persons attended the hearing in St. Cloud. Nineteen persons signed the hearing register. The hearing continued until all interested persons, groups or associations had an opportunity to be heard concerning the adoption of these rules.

The record remained open for the submission of written comments for twenty calendar days following the hearing, to February 2, 1993. Pursuant to Minn. Stat. § 14.15, subd. 1, five business days were allowed for the filing of responsive comments. At the close of business on February 9, 1993, the rulemaking record closed for all purposes. The Administrative Law Judge received written comments from a number of interested persons during the comment period. The MPCA submitted written comments responding to matters discussed at the hearing and proposing further amendments to the rules.

This Report must be made available to all affected persons upon request for a least five working days before the agency takes any further action on the rules. The agency may then adopt a final rule or modify or withdraw its proposed rule. If the MPCA makes changes in the rules other than those recommended in this Report, it must submit the rule with the complete hearing record to the Chief Administrative Law Judge for a review of the changes prior to final adoption. Upon adoption of a final rule, the agency must submit it to the Revisor of Statutes for a review of the form of the rule. The agency must also give notice to all persons who requested to be informed when the rule is adopted and filed with the Secretary of State.

Based upon all the testimony, exhibits, and written comments, the Administrative Law Judge makes the following:

FINDINGS OF FACT

Procedural Requirements

1. On November 18, 1992, the MPCA filed the following documents with the Chief Administrative Law Judge:

- (a) a copy of the proposed rules certified by the Revisor of Statutes;
- (b) a copy of the Agency's Authorizing Resolution;
- (c) the Order for Hearing as mailed;
- (d) a copy of the State Register containing the Notice of Hearing;
- (e) the Agency's certification that its mailing list was accurate and complete;
- (f) the Affidavit of Mailing the Notice to all persons on the MPCA's mailing list;
- (g) the Affidavit of Mailing the SONAR to the Legislative Commission to Review Administrative Rules.
- (h) the Affidavit of Discretionary Notice;
- (i) the Statement of Need and Reasonableness (SONAR);
- (j) a copy of the Notice of Intent to Solicit Outside opinion with copies of all comments received from interested parties; and,
- (k) an estimate of the length of the hearing and the number of persons who would attend the hearings;

2. On November 12, 1992, the MPCA mailed the Notice of Hearing to all persons and associations who had registered their names with the MPCA for the purpose of receiving such notice and those persons to whom additional discretionary notice was given.

3. On November 16, 1992, a copy of the proposed rules and the notice of hearing were published at 17 State Register 1194.

4. Minnesota Rules part 1400.0300 requires that some of the documents listed in Finding 1 be filed with the Administrative Law Judge prior to giving notice of the hearing. Those documents were filed 3 days after the notice was published in the State Register. Failure to comply strictly with the rule is a procedural error. The error constitutes a defect in the rulemaking process if the error is not harmless. Minn. Stat. § 14.15, subd. 5.

Minn. Stat § 14.15, subd. 5 requires the Administrative Law Judge to disregard any procedural error if that error is harmless. Two factors are set out in the statute to measure the error. First, did the error deprive any person or entity of the opportunity to meaningfully participate in the rulemaking. Second, was any corrective action taken that that persons would not be so deprived. In this instance, the late filings only deprived the MPCA of the opportunity to have their proposed documents reviewed by the Administrative Law Judge. No persons were denied any opportunity to participate. There was no corrective action needed to prevent any person from being deprived of an opportunity to participate. The late filing is a harmless error and, pursuant to statute, shall be disregarded.

### Nature of the Proposed Rules and Statutory Authority.

5. As a result of the widespread use of petroleum products throughout Minnesota, spills and leaks occur from tanks and pipelines. Often the containment of these releases is inadequate to prevent the petroleum from reaching the soil. Once that has occurred, the soil is contaminated with the petroleum. At sufficiently high levels, the contaminated soil poses an environmental hazard. Among the methods used to treat petroleum contaminated soil is spreading the contaminated soil thinly over land. This method uses the biological, chemical, and physical properties of the soil and petroleum to speed the breakdown of petroleum into its constituent parts.

In the proposed rules, petroleum contaminated soil is removed from the Agency's general solid waste regulatory system. A specific system for testing, treatment, and disposal of such soil is proposed in these rules. Under Minn. Stat. § 116.07, subd. 4 the MPCA has the authority to "adopt . . . rules . . . for . . . the prevention, abatement, or control of water, air, and land pollution . . . ." The Administrative Law Judge concludes that the MPCA has statutory authority to adopt these rules.

### Small Business Considerations in Rulemaking.

6. Minn. Stat. § 14.115, subd. 2, provides that state agencies proposing rules affecting small businesses must consider methods for reducing adverse impact on those businesses. The MPCA asserted that the proposed rules will have "little, if any negative impact on small businesses." SONAR, at 74. The MPCA maintains that the rules are consistent with the general practices presently used in soil spreading. The alternative, thermal treatment (also known as "roasting"), is \$10-20 per cubic yard of soil more expensive than soil spreading. SONAR, at 74. The MPCA has examined the rules in light of the agency's responsibility toward reducing the burden on small businesses. The MPCA has concluded that the rules are technically and administratively straightforward. The MPCA's experience has been that small generators of contaminated soil can complete the required applications without the aid of consultants. *Id.* Reimbursement is available for clean-up costs for releases from petroleum storage tanks and this reduces the financial impact on many small generators. The MPCA has met the requirements of Minn. Stat. § 14.115, subd. 2 to consider methods of reducing the impact of the rules on small businesses.

### Economic Impact.

7. In rulemaking, the MPCA is required to "give due consideration" to business, industry and other economic factors affecting the feasibility and practicality of its proposed rules. Minn. Stat. § 116.07, subd. 6. The proposed rules will not have a significant economic impact on businesses affected by these rules. Land spreading is presently used to treat petroleum contaminated soil. The rules do not prevent this practice, but the rules do establish standards regulating how the practice may be carried out. The rules are intended to be consistent with current practices in land spreading. There is no capital investment required. The smallest amounts of contaminated soil are exempt from the rules, under certain circumstances. The costs directly imposed by the rules are in storage and testing. Indirect costs are established by limitations on the amount of petroleum contaminated soil which

can be spread on particular acreages. These are appropriate costs to be paid by the contaminated soil generator. The benefits derived from the rules accrue to the entire State through protection of its soil and water quality. The minimal economic impact of the rules is appropriate in light of the benefits of proper handling of petroleum contaminated soil. The MPCA has met the requirements of Minn. Stat. § 116.07, subd. 6 by taking into consideration the economic impact of the proposed rules in its determination that the rules are feasible and prudent.

#### Fiscal Notice.

8. Minn. Stat. § 14.11, subd. 1, requires the preparation of a fiscal notice when the adoption of a rule will result in the expenditure of public funds in excess of \$100,000 per year by local public bodies. The notice must include an estimate of the total cost to local public bodies for the first two years for which the rule will be in effect. In its Notice of Hearing, the MPCA stated that the proposed rules would not require the expenditure of funds by local public bodies. The Agency has met the requirements of Minn. Stat. § 14.11, subd. 1 through its estimate published in the Notice of Hearing.

#### Impact on Agricultural Land.

9. Minn. Stat. § 14.11, subd. 2 (1988), imposes additional statutory requirements when rules are proposed that have a "direct and substantial adverse impact on agricultural land in the state." The statutory requirements referred to are found in Minn. Stat. §§ 17.80 to 17.84. Adverse impact is any action which would substantially restrict the agricultural use of the land in the form of acquiring farmland for a nonagricultural purpose, granting a permit for the nonagricultural use of farmland, leasing state-owned land for nonagricultural purposes, or granting or loaning state funds for uses incompatible with agriculture. Minn. Stat. § 17.81, subd. 2. Some farmers objected to allowing land spreading as having an adverse impact on farms engaged in agriculture. The adverse impact claimed by these commentators is not that the proposed rules would establish permits limiting what uses agricultural land can be put to. Rather, their objection is that the proposed rules would allow the existing practice of land spreading as a legitimate use of farmers' lands. The proposed rules will not have an adverse impact on agricultural businesses through requiring additional capital investment. The proposed rules would, however, limit the crops which could be grown on land used for disposal and treatment of petroleum contaminated soil. Since the practice of land spreading on agricultural land preceded these rules, and since these rules, if anything, would only minimally limit that land use, the proposed rules will have no substantial adverse impact on agricultural land within the meaning of Minn. Stat. § 14.11, subd. 2 (1988).

#### Reasonableness of the Proposed Rules.

10. The question of whether a rule is reasonable focuses on whether it has a rational basis. The Minnesota Court of Appeals has held a rule to be reasonable if it is rationally related to the end sought to be achieved by the statute. Broen Memorial Home v. Minnesota Department of Human Services, 364 N.W.2d 436, 440 (Minn.App. 1985); Blocker Outdoor Advertising Company v. Minnesota Department of Transportation, 347 N.W.2d 88, 91 (Minn.App. 1984). The Supreme Court of Minnesota has further defined the burden by requiring that the agency "explain on what evidence it is relying and how the evidence

connects rationally with the agency's choice of action to be taken." Manufactured Housing Institute v. Pettersen, 347 N.W.2d 238, 244 (Minn. 1984). In support of the adoption of the proposed rules, the MPCA has prepared a Statement of Need and Reasonableness (SONAR). The Agency has relied primarily on its SONAR as its affirmative presentation of need and reasonableness at the hearing. The Agency's comments made at the public hearing and in written comments following the hearing supplemented the Agency's presentation. This Report will not discuss each rule part, or each change proposed by the MPCA from the rules as published in the State Register. The Report will focus on those provisions that the Administrative Law Judge or members of the public questioned. Persons or groups who do not find their particular comments in this Report should know that the Administrative Law Judge has read and considered each and every suggestion. A part not commented on in this Report is hereby found to be needed and reasonable and does not exceed the statutory authority for the promulgation thereof. It is further found that on those parts not commented on, the MPCA has documented its need and reasonableness with an affirmative presentation of facts. Any change not commented upon is found not to constitute a substantial change.

#### Existing Rule 7035.0300 - Definitions.

11. Minnesota Rules part 7035.0300 establishes the definitions to be used throughout the solid waste rules. The proposed rules add definitions for petroleum contaminated soils and petroleum contaminated soil land treatment site. The MPCA also deleted those two terms from the definition of solid waste, Minnesota Rule 7035.0300, subpart 100. Some comments received by the MPCA before the hearing suggested that changing the solid waste definition would cause confusion between the rules and Minn. Stat. chap. 116. and also raise questions as to the counties' authority to regulate petroleum contaminated soil at a land treatment site. Based on these comments, the MPCA removed the modification to the definition of solid waste and relied instead upon the new language added to Minn. Rule 7035.0400. Dropping the modification to the definition of solid waste does not alter the effect of the adoption of these rules, and has been demonstrated to be needed and reasonable to keep the rules and statute consistent. It does not constitute a substantial change.

#### Existing Rule 7035.0400 - General Requirements.

12. The general requirements of solid waste handling are set by Minnesota Rules part 7035.0400. The MPCA has added language to exempt petroleum contaminated soil stored or treated at a petroleum contaminated soil land treatment site. Under the added language, those forms of solid waste are required to be managed pursuant to the new system established under proposed rule chapter 7037. The new language clearly establishes the relationship of the solid waste system to petroleum contaminated soil. The added language is needed and reasonable.

#### Proposed Rule 7037.0100 - Definitions.

13. Proposed rule 7037.0100 establishes 32 definitions, most of which are not at issue in this proceeding. Any definition not mentioned in this Report is found to be needed and reasonable.

#### Subpart 14 - Petroleum.

14. Petroleum is defined in subpart 14 by cross-referencing to a definition in another rule chapter. Subpart 14 also excludes some products from the definition of petroleum. The exclusion reads:

Petroleum does not include a fraction of crude oil or constituents of gasoline if they were used or were intended for use in virgin or pure form including but not limited to benzene, toluene, and xylene.

Ordinarily, "including but not limited to" is defective language. The result of that language is a noninclusive list which may be too vague to apply. In this case, however, the language which precedes the list is adequate to advise the regulated public of what constituents or fractions are not considered petroleum. Subpart 14 is not defective and has been shown to be needed and reasonable. The Judge suggests, but does not require, that "but not limited to" be deleted as surplusage. Deleting that phrase does not substantially change the rule.

#### Subpart 24 - Seasonal High Water Table.

15. Subpart 24 defines "seasonal high water table" as the highest level of the water table during any given year or in the recent past. The past level is determined by soil mottling or color changes. The definition also references part 7037.3300, subpart 6 for methods to determine the seasonal high water table. James C. Balogh, Ph.D, CPSS, Senior Soil Scientist for Spectrum Research, objected to the use of color changes or soil mottling to determine the seasonal high water table. He cited numerous other causes of soil mottling which do not indicate the seasonal high water table. Dr. Balogh urged that soil profiles be prepared for each storage or treatment site to determine the rate at which water percolates through the soil. The MPCA consulted with Dr. James Anderson of the University of Minnesota Extension Service concerning the reliability of using soil mottling or color changes. Dr. Anderson suggested modifications to the determination of the seasonal high water table, found in proposed rule 7037.3300, subpart 6. This suggestion implicitly supports the use of color and mottling to determine the seasonal high water table. Performing a soil profile at each site will necessarily increase the cost of treatment and disposal of petroleum contaminated soil. Much, if not all, of the information sought through these profiles is presently available through other readily available means. The MPCA has demonstrated that its definition of seasonal high water table, as modified, is needed and reasonable to allow effective treatment of petroleum contaminated soil before the contaminants reach the water table.

#### Subpart 28 - Treatment Zone.

16. Subpart 28 defines "treatment zone" as the total thickness of native soil above the seasonal high water table. If bedrock is closer to the surface than the seasonal high water table, then the treatment zone terminates at bedrock. Before the public hearing, the MPCA added language to clarify that the treatment zone ends at a tile drainage system. Only native soils treat petroleum contaminated soil. Once petroleum reaches bedrock, no further treatment occurs. Petroleum reaching the water table causes contamination. Similarly, petroleum reaching a tile drainage system is no longer being treated and will be carried into the water drainage ditch system. The

definition of treatment zone is needed and reasonable. The modification adding tile drainage systems as a limit to the treatment zone is needed and reasonable and does not constitute a substantial change.

#### Subpart 32 - Wetland.

17. As originally proposed, "wetland" was defined in subpart 32 as a surface water feature classified in a publication incorporated by reference. An internal MPCA memorandum suggested that the statutory definition of wetland be used in the rule. Before the public hearing, the MPCA modified the rule to read:

"Wetland" means "wetlands" and "public waters wetlands" as defined in Minnesota Statutes, section 103G.141, subdivisions 18 and 19.

The modified language is needed and reasonable, and does not constitute a substantial change.

#### Proposed Rule 7037.0400 - Petroleum Contaminated Soil Treatment Options.

18. Ultimately, the MPCA seeks to ensure that petroleum contaminated soil is treated and disposed of in a manner which will not result in adverse consequences to the soils or groundwater of the state. Subpart 1 of proposed rule 7037.0400 sets out four options to treat and dispose of petroleum contaminated soil. The options are: land treatment at an approved site; land treatment at a permitted facility; thermal treatment in a permitted roaster; and any other method allowed by agency rules. The first three options are presently in use. No one objected to limiting petroleum contaminated soil treatment to the four identified options. The fourth option, any other method allowed by agency rules; is specifically discussed in the SONAR as allowing any future methods which may "prove environmentally sound." SONAR, at 27. The MPCA has demonstrated the need for and reasonableness of this rule part.

#### Proposed Rule 7037.0500 - Sampling and Analysis of Petroleum Contaminated Soil.

19. The sampling procedures, analysis requirements, and further evaluations are set out in the four subparts of proposed rule 7037.0500. Subpart 1 requires grab samples for some testing and composite samples for other testing. The standards for collecting the samples is set out in parts 7037.2900 and 7037.3000. Sampling is supported by the MPCA as needed and reasonable since different amounts of petroleum contaminated soil are allowed on identical acreage depending upon the level and type of contaminants.

Interprovincial/Lakehead Pipeline Company, Inc. (Lakehead Pipeline) objected to the use of grab samples as an inadequately representative method for determining TPH. The MPCA declined to change the rule on the ground that the sampling required was not intended to monitor the impact of petroleum contaminated soil once it is spread on a site. Composite sampling, used to determine TPH, is used for monitoring as set forth in proposed rule 7037.2700. Subpart 1, as originally proposed, is needed and reasonable.

20. Subpart 2 establishes a table of parameters to be tested for, depending upon what contaminant is present in the soil to be treated. Lakehead Pipeline suggested that the diesel-range organic (DRO) test be used

instead of TPH for assessing the crude oil content of petroleum contaminated soil. The intent of the change is to provide consistent test results over different types of crude oil. The MPCA agreed with the suggestion and modified the table and related subparts accordingly. The rule, as modified, has been shown to be needed and reasonable. The change is not a substantial change.

21. The toxicity characteristic leaching procedure (TCLP) is required under subpart 3 for soil contaminated with leaded gasoline and aviation gasoline if total lead is present at a level equal to or greater than 20 times its toxicity characteristic regulatory concentration level as given in part 7045.0131, subpart 8. Paul Brandt objected to using the TCLP as too expensive and suggested that the generator's knowledge of what contaminants are in the soil be allowed as an alternative to performing the TCLP test. As proposed under both subparts 3 and 4, the generator's knowledge of contaminant parameters is considered before the TCLP test is required. When the specified fuels contain lead, a TCLP test is needed to determine the appropriate disposal or treatment option. The MPCA has shown that requiring the TCLP in specified circumstances is needed and reasonable.

Mr. Brandt suggested that the rule contains three different lead standards, which causes the rule to be vague. The only issues raised by the different lead levels are when TCLP testing is required, when the petroleum contaminated soil must be managed under the hazardous waste rules (Chapter 7045), and when must soil be placed more thinly when treated by land spreading. These issues are clearly resolved by specific lead standards. The critical question is how much lead is in the soil. To determine that level, the lead content of the TCLP leachate is examined. The different lead standard is based on the increased amount of lead likely to be present in leachate from the TCLP. Thus, a soil lead standard must be set in addition to the TCLP leachate standard. The third lead standard, 300 ppm, is taken directly from the soil lead standards for playgrounds and residential areas. Ensuring that the 300 ppm standard is met on land spreading sites protects crops grown there and ensures that subsequent uses of the land are not compromised. There is no defect in the proposed rules arising from the differing lead standards.

#### Proposed Rule 7037.0700 - Exemptions.

22. Subpart 1 of proposed rule 7037.0700 exempts amounts of petroleum contaminated soil which are less than 10 cubic yards from the requirements of these rules. Ten cubic yards is equivalent to one dump truck load. The only condition to be met to gain this exemption is a finding from the Commissioner of the MPCA that the particular soil need not be disposed of in accordance with the rules to protect human health and the environment. The subpart contains six factors which the Commissioner must consider in approving the exemption. The factors listed in the subpart provide adequate standards to limit the discretion of the Commissioner in deciding on requests for exemptions. David N. Sauer, Regulatory Affairs Coordinator of Ashland Petroleum Company, suggested that a categorical exemption be granted to soils with a total petroleum hydrocarbons (TPH) of ten parts per million (ppm) or less. The MPCA stated that it did not recommend removal of soils from contaminated sites if the petroleum contamination did not exceed 10 ppm of TPH, but once soil was removed, the Agency did not want to remove all controls on its placement. The Agency fears that sporadic low readings might be caused



by errors in lab analysis or errors in sampling, and that it is appropriate to place some limits on placing such soils. Supplemental SONAR, at 4. The MPCA has demonstrated that the exemption standard in subpart 1 is needed and reasonable.

Proposed Rule 7037.0800 - Overview of Standards and Approval Procedures for Land Treatment Sites.

23. The purpose of proposed rule 7037.0800 is to set out the effect of these rules on the conduct of all the participants in the disposal and treatment of petroleum contaminated soil. The Commissioner is to approve only the sites not prohibited by 70037.0900 and meeting the standards of proposed rule 7037.1000. Persons requesting approval of a site must follow proposed rules 7037.1100 and 7037.1200. Preliminary approval is received by obtaining the Commissioner's approval under rule part 7037.1100. Spreading cannot begin, however, until approval of the Commissioner is granted under rule parts 7037.1300 and 7037.1400. Those rule parts require complete applications, complete site information, and final approval of the Commissioner.

As originally proposed, on-site storage was not allowed until all the rule parts cited in the foregoing paragraphs were complied with and approval received. Staff of a MPCA regional office objected to that limitation, arguing that the soil must be stored somewhere and the source site of the contaminated soil may be less suitable than the spreading site. The MPCA agreed with the suggestion and modified the proposed rule to allow on-site storage upon preliminary approval of the site, provided that the complete application is filed within 30 days of initial site storage. The site must meet the requirements of storage areas in part 7037.1000, subpart 6. If approval is ultimately denied, the contaminated soil must be removed within 30 days. The modified rule part allows the operator of a potential spreading site to accept the risk that contaminated soil may have to be moved to another site, while meeting the need for storage space pending final approval. The rule part, as modified, is needed and reasonable. The modification does not constitute a substantial change.

Proposed Rule 7037.0900 - Prohibited Areas for Land Treatment Sites.

24. Land treatment sites are prohibited in a number of locations under proposed rule 7037.0900. The sites prohibited are lands: within a ten-year floodplain; within 200 feet of intermittent streams, drainage ditches, tile drain inlets, the ordinary high water level (OHWL) of public waters, and wetlands; within 200 feet of caves, sinkholes, or exposed bedrock; within 200 feet of private wells for potable water; within 1,000 feet of public wells for potable water; within 500 feet of a recreational area or residential development; within 200 feet of a habitation; and within 200 feet of a property line. The last two prohibitions are not absolute. The owner of the habitation or neighboring property may consent to land spreading within that zone and, in such circumstances, the treatment may be done, consistent with the other rules governing the practice.

A number of commentators suggested increasing or decreasing the size of various exclusion zones either to increase protection against contamination of nearby lands and water, or to increase the area available on which to conduct land spreading. William R. Uffelman, Divisional Vice President of Governmental Affairs for Browning-Ferris Industries (BFI), urged that the

prohibitions be modified to allow an operator to demonstrate that sites can be made safe, rather than have them automatically excluded by definition.

25. The MPCA has supported each requirement in part 7037.0900 with a rationale consistent with the purpose for establishing a setback or prohibiting land spreading. Where larger numbers of persons are involved (i.e., public wells, recreational areas, and housing developments) larger setbacks are required. Where runoff and odor is a concern, 200 feet is the setback. The minimum proposed setback distance is 50 feet farther than the maximum setback requirement in the Department of Natural Resources shoreland rules. Minn. Rule Ch. 6120. The areas for which absolute prohibitions have been proposed are sensitive areas which require protection. Proposed rule 7037.0900 is needed and reasonable as proposed.

#### Proposed Rule 7037.1000 - Criteria for Land Treatment Sites.

26. The operational limits, treatment zone characteristics, and topographical standards for land treatment sites are set by proposed rule 7037.1000. Subpart 1 limits any one site to 1,500 cubic yards of petroleum contaminated soil, no other site within one-quarter mile may be operated within five years, and operations may continue only from the issuance of the letter of approval to November 1 of the following year. Two or more sites may operate within one-quarter mile within the five year limit so long as the total soil treated is less than 1,500 cubic yards. BFI objected to this provision as too restrictive and suggested a site-by-site assessment be performed. The purpose of the limit, however, is to ensure that the entire area surrounding a site is not overloaded with contaminated soil. Subpart 1 is needed and reasonable.

Subpart 2 requires 50-foot filter strips if the land treatment site is located within 500 feet of certain sensitive public waters. BFI objected to the filter strip requirement as too restrictive. Subpart 2(C) requires a filter strip if the site is within 500 feet of an intermittent stream, drainage ditch, or tile drainage inlet which outlets to one of these sensitive waters. Staff of a MPCA regional office queried whether any number of intermediate streams or ditches triggers the filter strip requirement. The MPCA responded by adding "directly" to the rule part. This modification clarifies that the first outlet must be to the sensitive water. The change is not a substantial change. Filter strips have been shown to be needed and reasonable to ensure that sensitive waters are not harmed by land spreading operations.

Subpart 5 establishes the characteristics which treatment zones must have to be used as a land spreading site. The two aspects which are critical to effective treatment of petroleum contaminated soil are permeability and presence of organic matter. The higher the organic matter content, the faster petroleum is broken down into its constituents. The greater the permeability, the deeper the soil must be, to keep the contaminants in contact with the organic content of the soil. By the time of the hearing, the MPCA suggested deleting two exceptions in subpart 5(A). The first exception, item 1, relating to tile lines, has been incorporated into the treatment zone definition. The second exception, item 2, would have allowed perched water systems to be used as treatment zones. One commentator asserted that perched systems may be a significant water source for sensitive waters. Deleting the exemption removes some land from availability as land treatment sites. There

is no indication that the exemption is required or that undue harm will result from removing the exemption.

Dr. Anderson suggested that the Agency's original system, with two different thicknesses for four percent organic content and two percent organic content, be consolidated and simplified. The MPCA further modified the subpart in accordance with this comment. As modified, subpart 5 establishes two different thickness requirements for soil with a permeability less than six inches per hour and two lesser thickness requirements for soil with a permeability of less than 0.6 inches per hour. The MPCA also added a clarification that different layers or horizons of soil could be added together within the treatment zone to determine eligibility. The modified subpart is simpler, easier to apply and retains the same standards as the published rule. Several related rules are changed to conform to the new language.

Lakehead Pipeline objected to the specific standards required by part 7037.1000 as being arbitrary. This commentator suggested that each site be assessed on a case-by-case basis. The MPCA declined to adopt such an approach. The standards set forth in the rule part have been supported by specific facts. Some sites which may otherwise be suitable could be ineligible under these specific standards. However, any ineligible site operator may apply for a variance under part 7037.0300. For the MPCA to adopt a case-by-case process would require new rules and impose significant additional costs either on site operators or the MPCA. The standard-based system chosen by the MPCA requires less analysis and provides more certainty to the regulated public. The MPCA's approach has been demonstrated to be needed and reasonable.

27. Lakehead Pipeline also suggested that the MPCA expand the requirements for storage areas in subpart 6 to allow engineered sites. The MPCA considered the creation of engineered sites unlikely given the cost involved, but did agree to add standards for engineered sites. The new language allows engineered sites if they meet the soil standards and are established on an impervious surface or a synthetic liner of 40 mil thickness or greater. The use of liners to protect water quality is becoming commonplace in disposal and treatment applications. The subpart, as modified, is needed and reasonable.

#### Proposed Rule 7037.1200 - Application Requirements for Land Treatment Sites.

28. Extensive background information and soil characterization is required in applications for land treatment site approval by subparts 1 and 2 of proposed rule 7037.1200. Dr. Balogh recommended that only degreed soil scientists be relied upon by applicants. The MPCA declined to make the rule stricter, retaining the provision the soil scientists with mapping experience based on on-site investigation prepare soil maps for the application. The MPCA based this decision on the lack of any official credentialing standard among soil scientists in Minnesota. The standard chosen is needed and reasonable.

29. Dr. Balogh also objected to the use of Soil Conservation Service soil survey maps. He characterized 35-50% of the soils as something other than what shows on the maps. Subpart 2 requires the application for site approval to include such maps, if available. The commentator's objection is based on the observation that these maps (and the information contained in

survey reports) were not prepared to evaluate the suitability of land for soil spreading. However, the maps and reports do contain information which is useful to determine that suitability, with the added benefit that the information is already available at minimal cost. The MPCA has made a policy decision that the cost of in-depth analysis is not justified by the additional data it would yield. The Agency has justified its choice to use general information, rather than in in-depth site analysis, in arriving at a decision on an application. The MPCA added the use of Soil Conservation Service soil interpretation records as another similar source of information. The modified subpart is needed and reasonable. The change does not constitute a substantial change.

One commentator asserted that subpart 2(C), which requires a map to be prepared of the treatment site and surrounding area within one-quarter mile, is unnecessary and excessive. Paul Brandt objected to that map requiring identification of any other land treatment site used within the previous five years. He argued that the information has been too difficult to obtain from the MPCA. The MPCA perceived the additional effort in preparing the map as minimal. Problems in retrieving data from the MPCA were acknowledged by the agency, but the staff asserted that the MPCA has improved its database. The staff also pointed out that the applicant can contact neighboring landowners to obtain the required information. Subpart 2 is needed and reasonable, as proposed.

### Subpart 3 - Local Government Notification.

30. Proposed rule 7037.1200, subpart 3 requires the applicant for site approval submit a copy of the application to the the county government and municipal government where the site is located. Ann Williams, a landowner in the Amity Creek-Lester River watershed of Lake Superior, maintained that local government notification was not sufficient to advise affected neighboring property owners of land spreading operations. Katherine Logan, Solid Waste Administrator of Polk County, suggested that notification of adjacent landowners be required. Debbie Ortman suggested a public hearing be held on each application and that the local government must approve the application. The MPCA responded that it lacks the statutory authority to impose particular procedures directing how local governments must act on applications. The MPCA concluded that adequate information was being transmitted to neighboring landowners under the proposed rules. Clark Montgomery, Beltrami County Commissioner, suggested that tribal governments be notified when land spreading is on land under their jurisdiction. The MPCA did make that change but reiterated that local approval was not required by the Agency's rule, only notification. If a local government chooses to impose additional procedures or requirements, it may do so, but the Agency cannot require them to. Other related rule parts were changed to conform to the new language. The MPCA has shown that subpart 3, as modified, is needed and reasonable. The change is not a substantial change.

### Proposed Rule 7037.1600 - Storage of Petroleum Contaminated Soil.

31. A crucial goal of the MPCA in adopting these rule is the prevention of contamination away from treatment sites. Specific storage standards for petroleum contaminated soil are established in proposed rule 7037.1600 to ensure that such soil does not migrate to sensitive areas while awaiting treatment. Subpart 1 allows on-site storage without runoff controls for up to

10 days. Commissioner Montgomery objected to this provision as unenforceable. The MPCA declined to change that provision. The 10-day period is supported by the MPCA on the ground that repeated heavy rains are the cause of runoff. SONAR, at 51. A 10-day period is almost always going to be short enough to avoid this problem and significantly eases the burden on operators who must manage the land spreading operation.

If the contaminated soil stored on-site cannot be spread within 10 days, runoff control in the form of cover or dams is required. Paul Brandt suggested "barriers" be used in subpart 1(B), instead of "geotextile material." John Ewert suggested straw bales be allowed in addition to geotextile material. The purpose of the change is to codify existing practices to establish runoff control. The MPCA modified item B to expressly include straw bales as an alternative to silt dams made of geotextile materials. The modification resulted from a commentator's suggestion and increases the alternatives available to operators without reducing runoff control. Subpart 1, as modified, is needed and reasonable. The change is not a substantial change.

#### Proposed Rule 7037.1700 - Dates and Climactic Conditions for Soil Spreading.

32. Under proposed rule 7037.1700, land spreading is limited to weather and site conditions where the ground is not frozen, no snow or ponded water is present, and the ground is capable of being tilled. In addition to the listed standards, the rule part prohibits land spreading between the dates of November 1 and April 1 of the following year. Thus, at the end of autumn, land spreading must cease and cannot resume until spring. Lakehead Pipeline objected to the dates and asserted that the standards were adequate to limit soil spreading to appropriate weather and soil conditions. Another suggestion raised by a commentator was to create zones with different dates to permit warmer parts of state more latitude to conduct land spreading earlier in spring and later in autumn. The MPCA declined to make any changes to the rule part on the ground that any climatic differences between northern and southern Minnesota would allow land spreading only two weeks more per year. The compliance benefits arising from fixed dates to begin and end land spreading far outweigh any lost time which might be available to an operator. Proposed rule 7037.1700 is needed and reasonable, as proposed.

#### Proposed Rule 7037.1800 - Petroleum Loading Limitations.

33. Under proposed rule 7037.1800, a maximum load of petroleum contaminated soil of four inches in depth or 540 cubic yards per acre can be spread. The MPCA chose four inches as the maximum depth due to the assurance that tilling that depth of contaminated soil would result in adequate mixing of native and contaminated soils. SONAR, at 53-4. If the calculations are done for the available square footage and a four-inch depth is added, 540 cubic yards exceeds the maximum load per acre by 2.2 cubic yards. The MPCA's choice of 540 cubic yards is close to the maximum available space at a four-inch depth, recognizes the inherent inaccuracy in measuring cubic yards of soil, and translates easily into dump truck loads (discussed at Finding 22, above). It is the equivalent to rounding a decimal point up, and does not constitute a defect in the rule part. Proposed rule 7037.1800 has been shown to be needed and reasonable.

Proposed Rule 7037.1900 - Prohibition of Mixing or Repeated Use.

34. Where the spreading of petroleum contaminated soil does not result in the maximum levels of contaminants in the particular plot, Lakehead Pipeline urged that the MPCA allow repeat spreading of soil on plots where the same contaminant was present. Lakehead also suggested that different batches from the same generator (assuming the same contaminant) be mingled for disposal on one plot. These practices would permit contaminated soil from different locations be mixed together. The MPCA maintains there is a greater environmental risk posed by such a practice. The MPCA has indicated that its resources do not allow for close examination and management of such plots. Measuring the effectiveness of treatment is extremely difficult where a different batch of soil is spread over a plot already used for treatment. Under the rule as presently proposed, a different batch may be spread on a site so long as a two foot buffer is left between plots. The proposed rule allows a large site to be conditionally approved and used based upon the soil requiring treatment and disposal. The remainder of the plot, less a two-foot border, would be available for a different batch of contaminated soil. Since the two-foot buffer is intended only to delimit individual patches, limited cross-contamination is not a significant concern. The MPCA has shown its prohibitions against mixing and repeat applications, and requiring a two-foot buffer, are needed and reasonable to prevent problems in treatment of contaminated soils.

Proposed Rule 7037.2300 - Spreading and Incorporation of Petroleum Contaminated Soil.

35. One commentator objected to one restriction in the rule part establishing standards for the spreading of contaminated soil, proposed rule part 7037.2300. The commentator stated that the requirement that petroleum contaminated soil "be spread uniformly over the entire designated plot" could require a small batch of contaminated soil be spread thinly over a large plot. This would impose a burden inconsistent with the other requirements of the rules. See, Finding 34. The MPCA deleted "over the entire designated plot" to carry out the suggestion. The modified language allows maximum use of each site and has been shown to be needed and reasonable. The modification renders the rule part consistent with other rules and does not constitute a substantial change.

Proposed Rule 7037.2700 - Monitoring and Reporting Requirements.

36. Once petroleum contaminated soil is spread and tilled, the mixed soil must be sampled, analyzed, and the results reported to the MPCA under proposed rule 7037.2700. For the most part, the rule did not receive comment. However, Lakehead Pipeline suggested that TPH was the incorrect parameter to test for in the monitoring process. Lakehead suggested that specific compounds with adverse health impacts be monitored. The MPCA indicated that DRO replaced TPH as the test parameter for crude oil and that met part of the commentator's concern. The MPCA uses TPH to determine the amount of petroleum remaining in the soil, which is the reason for the monitoring. SONAR, at 65. The Commissioner has the discretion to request testing for other parameters to protect health and the environment under subpart 4. The MPCA has shown its proposed rule to be needed and reasonable.

### Proposed Rule 7037.3300 - Characterization of Native Soils.

37. As discussed with the definition of "seasonal high water table" (Finding 15, above), and the use of Soil Conservation Service data (Finding 29, above), Dr. Balogh objected to certain methods adopted by the MPCA to characterize native soils. Proposed rule 7037.3300 establishes the methodology for characterizing native soils. The MPCA took Dr. Balogh's suggestion to seek outside expert advice. Dr. Anderson suggested the MPCA make modifications to subpart 6 which would clarify the color standards used in the rule as proposed. He also suggested that the rule specify that the color standards be the result of saturated conditions. Dr. Anderson did not suggest that the color standards be dropped or severely limited, as Dr. Balogh urged. The use of color standards allows a straightforward method of determining the seasonal high water table of a site. Any error in determining that water table is likely to be on the conservative side, since the color changes may be present above the water table as well as demarcating the actual seasonal high water table. If an applicant desires to determine the depth of the seasonal high water table by another method, a variance may be applied for. The MPCA has shown that the proposed rule, as modified, is needed and reasonable. The modification is not a substantial change.

### County Authority to Regulate Land Spreading.

38. A number of commentators urged the MPCA to require county or local approval of applications for land spreading sites. The Administrative Law Judge has found that the MPCA has no statutory authority to require counties to engage in an approval process. See Finding 30, above. Other commentators questioned whether counties have the authority to restrict or prohibit land spreading. A further related issue is whether counties could charge a fee to defray costs of processing county applications. These are issues beyond the scope of the rulemaking process. Evidence has been entered into the record to suggest that some counties already regulate land spreading and at least one county already charges an application fee. The rules do specify that approval by the agency does not release an applicant from any duty to comply with applicable local government requirements. There is no explicit preemption asserted in the rules, and their preamble speaks of the rules being "minimum standards". However, the full extent of county and local authority must be determined in a different forum.

### Penalties for False or Misleading Information.

39. R. Bruce Burton suggested that the MPCA adopt specific penalties for the use of false or misleading information in applications. The MPCA pointed out that Minn. Rule 7000.0300 makes deliberate misstatements on applications punishable under Minn. Stat. § 115.071, which provides for civil penalties. The MPCA already has the authority to accomplish what the commentator suggests. The only issue that remains is whether the agency has adequate funding to enforce that rule. That issue is beyond the scope of this rulemaking.

Based upon the foregoing Findings of Fact, the Administrative Law Judge makes the following:

## CONCLUSIONS

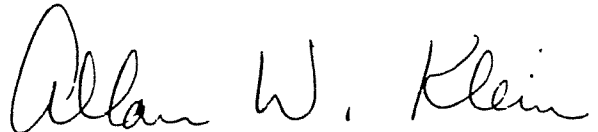
1. The Minnesota Pollution Control Agency (MPCA) gave proper notice of this rulemaking hearing.
2. The MPCA has substantially fulfilled the procedural requirements of Minn. Stat. §§ 14.14, subds. 1, 1a and 14.14, subd. 2, and all other procedural requirements of law or rule so as to allow it to adopt the proposed rules.
3. The MPCA has demonstrated its statutory authority to adopt the proposed rules, and has fulfilled all other substantive requirements of law or rule within the meaning of Minn. Stat. §§ 14.05, subd. 1, 14.15, subd. 3 and 14.50 (i) and (ii).
4. The MPCA has demonstrated the need for and reasonableness of the proposed rules by an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14, subd. 2 and 14.50 (iii).
5. The additions and amendments to the proposed rules which were suggested by the MPCA after publication of the proposed rules in the State Register do not result in rules which are substantially different from the proposed rules as published in the State Register within the meaning of Minn. Stat. § 14.15, subd. 3, and Minn. Rule 1400.1000, subp. 1 and 1400.1100.
6. A finding or conclusion of need and reasonableness in regard to any particular rule subsection does not preclude and should not discourage the MPCA from further modification of the proposed rules based upon an examination of the public comments, provided that no substantial change is made from the proposed rules as originally published, and provided that the rule finally adopted is based upon facts appearing in this rule hearing record.

Based upon the foregoing Conclusions, the Administrative Law Judge makes the following:

## RECOMMENDATION

IT IS HEREBY RECOMMENDED that the proposed rules be ADOPTED.

Dated this 11<sup>th</sup> day of March, 1993.



ALLAN W. KLEIN  
Administrative Law Judge

Reported: Taped, No Transcript Prepared.