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April 3, 2025

The Honorable Suzanne Todnem Administrative Law Judge Office of Administrative Hearings 600 Robert Street North Post Office Box 64620 St. Paul, MN 55164-0620

RE: In the Matter of the Proposed Permanent Rules Relating to Waste Treated Seed; Revisor's ID Number R-4806; OAH Docket No.23-9003-39350

Dear Judge Todnem:

This letter contains the Minnesota Pollution Control Agency's (MPCA's) rebuttal to comments it has received.

 The Agency has met its burden to show that the proposed rule is needed and reasonable.

Minnesota Statutes, section 14.14, subdivision 2, requires the Agency to "make an affirmative presentation of facts establishing the need for and reasonableness of the proposed rules..."

The Agency has stated its affirmative presentation in its Statement of Need and Reasonableness (SONAR), which the Agency relies on to establish the need for and reasonableness of the proposed rules. The Agency's evidence clearly meets the rational basis standard and shows that the proposed rules are needed and reasonable.

 The Agency has responded to the comments made and issues raised during the hearing and comment period.

MPCA's Rebuttal: The MPCA responded to comments received in response to the Minnesota Pollution Control Agency's (MPCA's) Dual Notice of Intent to Adopt Rules published December 30, 2024 in Exhibit L. This document is responding to comments submitted during the hearing and the post-hearing comment period. Six hearing attendees provided comments during the Waste Treated Seed Hearing on March 5, 2025. Four comments were submitted to the Office of Administrative Hearing's eComments website by March 26, 2025, for the Waste Treated Seed Rule post-hearing comment period. Many of the comments submitted included multiple components. The agency has summarized these comments and issues according to the

document referenced and in the order of the subpart or item that they relate to. The Agency's response follows each comment or issue.

In conclusion, the Agency has addressed the concerns raised during the hearing and comment period. The Agency has shown that the rules are needed and reasonable. We respectfully submit that the Administrative Law Judge should recommend adoption of these rules.

Sincerely,

Daniel Gonzalez

MPCA Rule Coordinator

Daniel Donzaley

DG:ds

Enclosure: Exhibit M - Pre-Hearing Response to Comments

Exhibit M: Agency response to comments during and after the March 5, 2025 Hearing, A. Comments regarding current practices and the importance of treated seed

Comment (Biegler-1): Bryan Biegler stated "I want to emphasize the critical role that treated seed plays for our corn farmers and to make it clear that we do not view unused or unsold treated seed as waste. If access to treated seeds were restricted, the consequences would be significant. Early season pest pressure would increase, forcing farmers to rely more heavily on in-season chemical applications, which are often less efficient and more costly. This would undermine the progress we've made in precision agriculture and integrated pest management. Economically, treated seed is one of the largest input cost for corn farmers, typically about the third highest after land and fertilizer costs. We invest in it because it provides a real return through better emergence, stronger plant stands and improved yields." ..." I encourage policymakers to recognize the value of treated seed and work with farmers to support practical science-based stewardship practices rather than imposing regulatory burdens. I would like to thank you for the time and for considering these perspectives."

Comment (Wentzel-1): Todd Wentzel stated "I want to provide comments today on the importance of treated seed to corn farmers and to emphasize that we do not view unused or unsold treated seed as a waste. Actually, the opposite is true, as this is a very valuable product for farmers and every effort is made to avoid and eliminate waste. I view these rules as unnecessary"

Comment (Johnson-1): Darin Johnson stated "First off, I will talk about the benefits of seed treatment on our farm. Number one, seed treatments reduce the overall pesticide use because it's targeted protection. Seed treatments apply small precise amounts of active ingredients directly to the seed, reducing the overall chemical load in the environment. Less spray passes protecting young seedlings early reduces the need for additional applications later in the season. And I'll just touch a little bit on, you know, how it has reduced our passes across the field actually by two-thirds because we are no longer having -- over the last five or six years, it's depressed our aphids enough where we have not had to spray for aphids, so that is just another benefit. Number two, it supports conservation and stewardship in soil health. Many Minnesota farmers use reduced or no till to improve soil health and reduced erosion. In a lot of cases you'll be planting in cooler soil in these situations. Also, generally speaking, Minnesota farmers are planting soybeans in cooler conditions across the state no matter the practice. Three, reduced erosion and runoff: A well established crop canopy made possible by a healthy seed reduces soil erosion, which is always a concern for water quality in Minnesota lakes and rivers. Avoid excessive seed use: So without protection, higher seed loss occurs due to pest and disease, potentially leading to costly replant that requires additional seed, fuel and labor. Also with that we have been able to reduce populations, which has helped us try and manage white mold

across the state, as well. Minnesota's climate creates high disease pressure. A wet, cool spring leads to diseases like pythium, phytophthora, also physarum and rhizoctonia. In total, those four diseases alone are costing us 90 million bushels in yield loss; and let's not forget to mention cyst nematode and sudden death, nematodes alone causing a 10 percent reduction in yield across the US. Also, the all-season-long insect suppression for pesky insects like aphids like I mentioned previously and bean leaf beetles, ultimately reducing yields and having to make more passes across the fields without the use of seed treatments.

Comment (Wentzel-2): Todd Wentzel stated "the use of treated seed enables farmers to precisely plant the desired number of seeds per acre and achieve the most economical return for their individual fields without the need to factor in a percentage of loss of seedlings...When ordering seed, farmers have tools available to them to calculate how much seed is needed for their farm and, in fact, right to the field level. Many farming systems exist that allow the farmer to enter precise plant population maps for given fields that will then calculate the units needed to sew that field or farm. Many times this may be done with consultation with their seed dealer or an independent agronomist. Modern planters can deliver the exact number of seeds per acre that are needed, enabling the farmer to avoid any leftover seed. With seed costs of around \$125 an acre for corn and \$70 per acre for soybeans, farmers are motivated to ensure that no seed is overused or spilled" and "we transport our seed from the farm to the field in a seed tender fitted with a conveyor belt to fill the planter. This system enables us to easily fill the planter's hoppers without handling individual bags, thereby reducing the chance of spillage by the use of those bags. The design of the conveyor system allows us to easily clean out the remaining seeds at the end of the crop year or when switching crops and capture that seed for later use. Our planter even came with a special cup that's used to catch any seed from the planting units as cleanout is done and that can be -- can prevent spills and can be saved. If an accidental spill should occur, I would ensure that it's cleaned up right away. This is going to be done by picking up any loose seed that we can with our chemical-resistant gloved hands and placing it in a container and any kernels that would be left over would be covered up by several inches of soil to ensure that no birds or animals could get to them, and by covering these seeds they will then grow in the field. Any seed that is left over after planting is stored in the original seed container, tied shut, and placed in our heated shop until the next planting season, when it will then be used for the next crop year. Usually this would amount to only one or two small units of seed. If the season does not allow us to plant all of our field, then any unused or unopened seed containers would be returned to the seed company, where they may then transfer them to another location which may still be able to plant that seed, or they will be saved over for the next season. As a seed dealer, I know that I'm expected to keep returns to a minimum, so therefore I closely manage my inventory. In the case of soybeans, most of my customers will order a few units of nontreated beans to finish planting with them so they will

have very little left over. What they do have left, they will similarly do what we do on our farm in saving that seed for the next season. If a customer should have leftover containers of seed, they would then return them to me and I would return them to the company that I sell for. This company does utilize deadlines for ordering seeds so that they can properly manage inventory and reduce leftover seed at the end of the season. When the company gets treated seeds returned to them, they are stored in an environmentally-controlled warehouse and tested throughout the winter. They will then be resold the next season as long as they meet quality standards. If they would fail these standards, they are sent to a permitted incineration facility."

Comment (Johnson-2): Darin Johnson stated "On our farm we use an on-demand treatment system. With these types of systems you're sending the treated seed out as needed. Also with these types of systems you are able to prescribe the exact recipes down to the milligram at a specific field level. They are absolutely precision machines. When I say they are measuring down to the milligram, that's not all. They are also factoring in the size of the beans, as well. Seed treatment can range in costs from 5 to 40 dollars a unit. Also, soybean seed ranges from 45 to 65 dollars a unit, so one unit would be considered 140,000 soybeans. That's equal to one unit and we're planting anywhere from 90 to 140 to 150 thousand. The average would probably be about 130,000 in southern Minnesota per acre. We, as farmers, cannot -- can simply not afford to treat seed that would not get planted. Another piece of precision aspect would be the ability to measure and quantify the amount of seed needed for each field almost down to the individual seed itself, pretty amazing technology available, and most farmers are very quick adopters of it because of the cost savings and the capability to be so precise. That, in turn, leaves us with very little extra treated seed. The treated seed that we do have left over is planted as a cover crop in some of our customers' vegetable crop fields which, again, leaves us with little or no wasted treated seed. In the case that we would, Bear, who we sell for, would return the seed to the plant."

Comment (Biegler-2): Bryan Biegler stated "Any policies that create unnecessary barriers to using or handling treated seed will add cost and complexity to farming operations at a time when margins are already tough. Corn farmers take stewardship of treated seed very seriously. We follow strict guidelines to ensure proper handling, storage and planting, making sure that as much seed as possible is used efficiently. In the case that seed is not used, it is usually returned to the seed dealer and then returned to the company, which will test and, if it meets specs, will rebag and sell the following season. For seed that does not make specs, for the company that I have sold for anyway, they send it to a federally regulated power plant to be incinerated and used for energy. Regulations that assume treated seed is a waste product are misguided and fail to recognize the responsible management practices already in place. For these reasons, I view the proposed rules as unnecessary and potentially harmful to farmers."

Response: The statutory authority and mandate for the MPCA to adopt rules to provide for the safe and lawful disposal of waste treated seed is found in Laws of Minnesota 2023, ch. 60, art. 3, sec. 28. The agency is required to propose these rules. The amendments to Minn. R. chs. 7035 and 7045 are being promulgated under that authority and the other authorities listed in Section 3 of the SONAR. The proposed rules do not apply to the intended legitimate use of treated seed, only to the management of waste treated seed. The proposed rules have no expectation of limiting the manufacture, distribution, or availability of treated seed to the end users. Handling, storage, and planting of treated seed that are not waste treated seed are unaffected. Specifically to the commenter's concern, the proposed rule does not prohibit or otherwise limit retention of treated seed from one growing season to another unless it will not be planted for the purpose of growing live plants in accordance with the instructions on the treated seed container label. The phrase "will not be planted" in the definition of "waste treated seed" does not require treated seed to be planted immediately. Under the proposed rules, incineration of waste treated seed in Waste-to-Energy facilities is allowed.

B. Comments supporting and reiterating comments submitted before hearing

Comment (Dean-1): Janette Dean stated "today we're addressing the MPCA's new regulations and we agree with them overall, but we would like the agency to closely review the comments that were submitted already in an important letter by two important leaders in this field, Rosemary Malfi, she's the policy director who submitted a letter on behalf of the Xerces Society for Invertebrate Conservation, Xerces; and also E. Hardy Kern, III, he's director of government relations for the pesticides and birds campaign on behalf of the American Bird Conservancy...They believe MPCA should also require a burial setback distance for waste treated seed that is greater than 200 feet for private wells that supply drinking water to humans or animals. MPCA should also prohibit WTS, waste treated seed, burial on well head protection areas. They must better define best practices for waste treated seed burial on farms. And the last three that we agree with that they are recommending, asking MPCA to track the waste treated seed quantities entering waste streams; two more, that they work with MDA to develop consistent labeling for treated seed in Minnesota as it relates to disposal requirements; and, finally, they recommend that spilled seed not recovered for planting should indeed be defined as waste treated seed. So, again, we're representing the members of our group all across the state. These are people working in many fields, many industries, not just farming. So Minnesota's role is to protect the public and I'm asking you to do that today with our comments."

Comment (Dean-2): Janette Dean stated "On behalf of the Sierra Club North Star Chapter's 50,000 members and supporters across Minnesota, the chapters' Forests and Wildlife Stewards Group and Water and Wetlands Stewards Group would like to share: a) our overall support of

the Minnesota Pollution Control Agency's proposed rules for waste treated seed (WTS) disposal—meaning, disposal of plant seeds coated with pesticides such as neonicotinoids—with b) our support for the additional recommendations provided in the pre-hearing letter of recommendations submitted on February 14 by the Xerxes Society of Invertebrate Conservation, the American Bird Conservancy, and the Pollinator Friendly Alliance. Our two Stewards groups also submitted this same main comment in our verbal testimony provided by Janette Dean at the proposed rule hearing on March 5."

Comment (Schneider-1): Laurie Schneider stated "We strongly support MPCA in creating rules for disposing of pesticide-treated seeds, which the legislature mandated they do when they passed HF1317. These rules help to safeguard people, wildlife, waterways, and groundwater. **We especially appreciate:** Clarification and codification of prohibited uses and reuses of WTS, including burning; composting; animal feed for domesticated or wild animals; and oil processing, fuel, or fuel production, which includes ethanol. Restrictions on the burial of treated seed, including provisions that prevent disposal on karst, wetlands, floodplains, and shorelands; and provisions that require disposal via landfill wherever municipal waste services are reasonably available.

Response: The MPCA considered a new requirement for solid waste management facilities to explicitly track waste treated seed volumes entering their facility and determined it was unnecessary. As noted in the comments, solid waste management facilities receiving waste treated seed must already identify whether their facility can safely and appropriately receive and manage quantities of waste treated seed. However, the MPCA believes that facilities can and likely may meet this requirement through means other than specific tracking of waste treated seed as a separate recorded waste stream. As an example, facilities may plan the size of new gas collection systems or assess the capacity of existing gas collection systems by using worst case scenarios for the many waste streams that can or would be expected to release substantial volumes of gas over the life of a land disposal facility, of which waste treated seed is only one, and expected to be a minor one. The MPCA believes that requiring a new specific data collection requirement to land disposal facilities would therefore be an unnecessary burden for the facilities, and to the state, which would require new staff to receive, compile, and analyze this data, and the MPCA declines to add this new requirement. Finally, the MPCA notes that neither the Session Law nor successive budget legislation required the MPCA to collect such data nor has appropriated any new staff to the MPCA to receive and analyze such new collected data, and therefore requiring facilities to collect it would be unsupported.

Under existing federal statutes and regulations, and under existing state statutes, the U.S. Environmental Protection Agency (EPA) and the Minnesota Department of Agriculture (MDA) have the authority to, and are responsible for, pesticide labeling and treated seed product

labeling. The MPCA has no authority to independently establish any pesticide nor treated seed product label requirements. While the MPCA would of course support and consult with the EPA and/or MDA in revision of existing or development of new treated seed packaging and labeling standards, such is beyond both the scope of this rulemaking and the MPCA's authority as defined by the Legislature.

While the U.S. Environmental Protection Agency (EPA) regulates the pesticides and fungicides used to treat seeds, including federal treated seed labeling requirements that specify treated seed use and disposal, the EPA acknowledged in a letter in 2022 and in the Federal Register in 2023 that the treated seed label directions are not currently enforceable under federal regulations. To the MPCA's understanding the MDA does not have enforcement authority for those regulations either. A regulation or a requirement in a regulation that cannot be enforced is not a requirement and cannot be relied on to protect human health or the environment.

C. Comments regarding the prohibition on burial methods of Waste Treated Seed

Comment (Dean-3): Janette Dean stated "So I just wanted to clarify that, again, while we're happy to see rules to have more proper disposal of waste treated seeds, when I was talking about the burial methods, I did want to clarify that, like others, we do agree that that is the least preferred option for disposal because this can further contribute to surface and groundwater contamination. Those lands could be disturbed in many types of ways and wildlife can be close to them. But we do want to say that these neonicotinoids also, which are used as seed treatments, they do often end up in waterways and our concern is the application to the seed is not absorbed by the plant fully enough and that's true of seeds that are exposed that aren't planted. So, again, we appreciate the strictest rules possible for the disposal of the seeds, and we will also continue to advocate for alternatives because of the harm that's being done to land, water, plants, animals and people beyond the crops; and we believe it's harmful to farmers, as well, and their land. So, again, people say it can mitigate pest damage, but we found that it's overused. We would really like the rules that prove where it's benefiting in crop plantings and not just assuming all use is really that effective after all. Thank you for your time today."

Comment (Schneider-1): Laurie Schneider stated "We urge MPCA to strengthen its final rule in the following ways: Please include stronger burial prohibitions and setbacks as they relate to well water, especially in places where the underlying aquifer is at 'moderate' to 'high' risk of contamination from overlying land use. Please include more detail about best management practices for burying WTS on farmland. The ongoing contamination event in Mead, Nebraska resulting from ethanol production with WTS should serve as a reminder to us all that improper disposal of WTS can have disastrous consequences for wildlife, water quality, and human health. These rules are necessary."

Response: The proposed rule establishes specific enforceable standards for burial of waste treated seed by a person operating land used for farming on that land in accordance with existing statute not within the scope of this rulemaking. The term "best practices" generally relates to recommendations to an industry or for methods believed generally beneficial, however as such are not typically able to be required or enforceable. The proposed rules already specify for burial sites: horizontal and vertical setback distances from surface waters, ground waters, and the surface; prohibited geology; prohibited landforms; and water presence, and narrative directions for final site contouring and sloping.

Regarding the comment requesting the MPCA relate standards for burial of waste treated seed by a person operating land used for farming on that land with "places where the underlying aquifer is at 'moderate' to 'high' risk of contamination from overlying land use," the MPCA believes without additional detail that the comment would necessarily refer to determinations and maps of Geologic Sensitivity to Pollution of Near-surface Groundwater, as determined and published by the Minnesota Department of Natural Resources (DNR). These determinations are detailed and very complex, and an integral component of the larger hydrogeological studies discussed in the justification for proposed Minn. R. 7035.3700, subpart 4, item A, subitem (3), on pages 28-30 of the SONAR. For the same reasons discussed for that subitem, the MPCA does not believe that the limited additional environmental protection possibly afforded by requiring persons who own or operate land used for farming to research, understand, and implement these complex DNR determinations would be reasonable or feasible. Therefore, for those reasons, the MPCA declines to add this requirement.

D. Comments regarding the incineration of Waste Treated Seed

Comment (Cook-1): Stacy Cook stated "I do -- while understanding that we need more ways to utilize it, I do disagree with the exception for burning in a waste energy facility as written. I believe it should have more restrictions on it. I think that waste energy facilities should be able to verify that that treatment molecule has been destroyed, which can be done through incineration. It can't be done in a corn stove at home or out in your barn or whatever necessarily because they don't have the means to measure what is required to destroy that molecule. Twelve hundred degrees Fahrenheit is required to be sustained on the surface of that seed to destroy that molecule. That is blown apart into its elemental components and it's no longer a treatment -- it's carbon, hydrogen, oxygen, nitrogen, it's just elements. So I think if we're going to allow an exception to burn in a waste energy facility -- and I'm very familiar with almost all of the waste energy facilities we have in this state because I work in that sector, in the power sector, and I've toured many of them and looked at their systems. They are not reaching anywhere near that temperature on the grates of those boilers. They have cooling and combustion air coming up from the bottom that's limited to, in most cases, less than 300

degrees. It's actually cooling the seed until it travels off the grate. It will vaporize and burn some, but there's live treatment coming off the end of that and then being quenched and then it's in the water that leaks back out of that ash before it gets to a landfill. So we need to have controls in place just to say a waste energy facility is fine to incinerate it because the ash is going to the landfill; that may be true. If they aren't reaching adequate temperatures in the combustion process, it can still survive leaving the stack."

Response: Verification of destruction of specific waste constituent molecules in emissions is a standard required under applicable Federal Regulations and Minnesota Rules to facilities incinerating regulated hazardous wastes and is extremely burdensome and expensive. As clarified in the proposed rule, waste treated seed management under the provisions of the rule is not regulated hazardous waste. The MPCA considered the risk of air emissions from incineration of waste treated seed in Waste-To-Energy facilities in Minnesota as similar to the existing and accepted risks of burning of household pesticides and other chemicals found in the mixed municipal solid waste stream. These facilities in Minnesota operate under permitted combustion temperatures and with regular emissions testing for harmful constituents. The MPCA believes that the proposed prohibition of incineration of waste treated seed in other than a facility permitted to burn mixed municipal solid waste or industrial waste or fuel derived from these wastes is sufficient to protect public health and the environment while not imposing unfeasible restrictions on the management of waste treated seed.

E. Comments regarding waste treated seed quantities in Minnesota

Comment (Cook-2): Stacy Cook stated "I would like to say that I appreciate the need for seed treatments for crop health and productivity; and I do appreciate that, from the growers' perspective, they are always trying to be as efficient as they can be with the utilization of that seed and, of course, they don't want to waste it. It is very expensive. However, there is still a lot of excess seed in the market. Seed companies carry excess stock to be able to plant more acres than sometimes are actually planted in the spring for some, maybe, wet areas or really dried out areas or maybe just a change in the crop rotation, a slight modification of the boundaries; but whatever the reason, there is a lot of waste treated seed that's excess every season. There is pretty much a constant supply that's being trucked through Minnesota and down to lowa to be burned in a cement kiln for the majority of it, and they're always looking for outlets."

Comment (Kleven-1): Bruce Kleven stated "I'm wondering if the agency could share with us how they arrived at 14,000 tons. I couldn't find any reference to that in the SONAR and I'm wondering how they arrived at that." and "I was curious if that data was in the record and I think it's significant because this, to me, seems to be overstating the problem by a lot. If we do simple math here, 14,000 tons just in Minnesota is 28 million pounds of seed that the agency

has considered just wasted, and we previously heard from a couple of farmers talking about the cost of this. I think, according to the Department of Ag stats, there's roughly 80,000 farms in the state, so if you divide that by 28 million pounds, the agency would have you believe that there are 350 pounds of wasted seed every year per farm, and that just seems like a lot. Another way to look at it would be the average semi holds about 55,000 pounds net of product. That would mean there are 509 semi loads of wasted seed every year according to the agency. So I would just -- it just seemed like an awfully high number to base this rule on. So I'm wondering in my follow-up, then, is any of that data, taking the ethanol plant and backing it into Minnesota from another state, if that data is in the record anywhere."

Comment (Cook-3): Stacy Cook stated "I actually feel that the 14,000-ton estimate is far short. We were actually working on an agreement, we had an agreement in hand that we were ready to sign before we realized that we had improperly qualified the treated seed fuel for our facility for 36,500 tons a year and we -- they wanted to increase that amount in volume because they still had more need to dispose of seed, but we had only stack-tested that at a hundred tons a day. So that's all we felt we were allowed to do and we found out later we weren't allowed to do any of it. So it is a huge problem, and it's not coming from the farmers. The farmer is only buying what they need or as close as they can possibly be. It comes from Remington Seeds that supplies Corteva and Pioneer and Homestead and Bear and all these other big seed companies across the country, and they have a guarantee with the seed companies that they are going to make sure that they have all the seed they need to plant their entire regions with seed of the various crops that are planted for that year. Now, if any individual farmer changes his crop plan or the seed orders don't come in to the seed companies at the rate that they expected, they always have excess; or if you change corn to beans or beans to corn at the last minute, you decide to change that rotation, well, now you have either a whole bunch of corn seed sitting there or a whole bunch of bean seed because they had the volume out there to be able to plant that spring for everybody. So that's where the big volume comes from, it's from the seed companies themselves. It hasn't been distributed to the farmers yet. There is some waste treated seed or excess treated seed on the farms and, like some of them said, they can overseed, they can cover crop. There are means to get rid of the small amounts in a safe -environmentally save manner. It's these bigger volumes, that's where the problem is, because even while we were burning up to a hundred tons a day in our facility trying to eliminate that -those treatment molecules because we thought we were inerting it and making it safe"..."So I just wanted to clarify that. It is a very large issue. You know, if I had given the agency some data, maybe that estimate would be much, much higher, because we were actually in contact with the companies that have all the seed and the problem of trying to dispose of it. So it exists, it's just how can it be responsibly taken care of as a waste product."

Response: Utilizing available public statements and data from and about the Mead, NE, site, which received considerable waste treated seed corn from Minnesota, and analyzing that data in light of contemporary data cropland planting in Minnesota, the MPCA roughly estimated 14,000 tons of WTS were generated in Minnesota annually circa 2020. Prior to providing this estimate during the hearing, the agency emphasized in its presentation and verbal statements at the hearing that the rulemaking is mandated by the Legislature. The number included in the presentation was identified as an estimated volume and an approximation was shared only to provide context for the potential relative volume of waste treated seed. While one commenter believed the number too high, another commenter stated they believe it is actually far short and that commenter related their direct experience and provided numbers to substantiate that statement.

Regardless, the overall amount of waste treated seed generated in the state was not relied upon to support the need and reasonableness of the proposed rule. As included in the written materials and verbal statements during the hearing, the need for the proposed rule is established by the Legislature's mandate that the agency conduct this rulemaking. The exact amount of waste treated seed generated in the state is not known. For these reasons, it was not included in the SONAR. Additional justification for the need and reasonableness of the proposed rule is both generally and specifically contained in the SONAR.

F. Comments regarding Statement of Need and Reasonableness

Comment (Berger-1): Matthew Berger stated "The Minnesota Pollution Control Agency Has Not Established the Need for the Proposed Rule Regulating Waste Treated Seed. Before adopting a proposed rule, the Minnesota Pollution Control Agency must "establish[] the need for and reasonableness of the proposed rule." See Minn. Stat. § 14.14, subd. 2 (2024). In its Statement of Need and Reasonableness for this proposed rule, the Minnesota Pollution Control Agency makes the bald assertion that it "established the need for each of the existing requirements here collated and clarified at the time it originally adopted or significantly amended the rules, and no further justification is necessary." (SONAR, at p. 6.) But the alleged "requirements" on which the Minnesota Pollution Control Agency refers in this statement were not actual rules that were adopted through a formal rulemaking process that required the agency to establish the need for and reasonableness of the requirements—rather, as the agency acknowledges, the alleged "requirements" were merely informal guidance that were included in a fact sheet the agency published without public input or administrative or judicial review. (See id.) Thus, the Minnesota Pollution Control Agency has not established the need for the proposed rule as required under the Administrative Procedures Act."

Response: The commenter cites to a portion of the statement of general need, included in the SONAR, which reads as follows:

B. Statement of general need

The MPCA refers to the proposed amendments in this Statement of Need and Reasonableness (SONAR) as mandated. The MPCA does not believe that the proposed amendments make substantial changes or impose significant new requirements. The MPCA established the need for each of the existing requirements here collated and clarified at the time it originally adopted or significantly amended the rules, and no further justification is necessary.

The need for this rule is established by the Legislature's mandate in Laws of Minnesota 2023, ch. 60, art. 3, sec. 28 ("Session Law"), which is referenced in the immediately preceding paragraph on page 6 of the SONAR. The Session Law states: "The commissioner of the Pollution Control Agency, in consultation with the commissioner of agriculture and the University of Minnesota, must adopt rules under Minnesota Statutes, chapter 14, providing for the safe and lawful disposal of waste treated seed."

Additionally, the commenter misinterprets the text taken from the statement of general need found on page 6. The proposed rule modifies certain existing rules that have already been promulgated according to the Administrative Procedures Act. The need and reasonableness of the unmodified portions of those rules do not need additional justification. Other portions of the proposed rules reference to or are derived from existing laws that are explained in an MPCA guidance document. The justification is supported by the existing laws, which are summarized in guidance. Additionally, each provision in this rulemaking is supported by a specific discussion of the need and reasonableness.

Comment (Berger-2): Matthew Berger stated "The Minnesota Pollution Control Agency's assertion that the proposed rule is needed is also based on false factual and legal premises. As to the factual basis, the Minnesota Pollution Control Agency asserted during the hearing on March 5, 2025, that it needs to regulate the disposal of waste treated seed because it estimates that 14,000 tons of waste treated seed are produced in Minnesota each year. This estimate, however, was not included in the Statement of Need and Reasonableness for the proposed rule. And when the agency was questioned regarding the facts and methodology that support this assertion, the agency broadly referred to data from Kansas, based on information related to an ethanol plant in Nebraska. As identified by Mr. Bruce Kleven during the hearing, the accuracy of this estimate is highly questionable as the estimate appears to assume that approximately 10 percent of the seed used each year to plant 8 million acres of corn and 7 million acres of soybeans would not be planted and would need to be managed as waste. Based

on the significant costs that farmers incur for seed, and the careful management that farmers use when ordering seed to minimize these costs, these estimates appear highly unreasonable.

After these factual concerns were raised, the Minnesota Pollution Control Agency indicated that it would provide more information about this factual premise in a supplement response to comments. This process, however, deprives the public of any opportunity to scrutinize, comment on, or rebut the underlying facts and process that the agency used to support this critical fact. Because the Minnesota Pollution Control Agency did not introduce in the Statement of Need and Reasonableness or the hearing sufficient evidence to support its factual premise, the agency has failed to establish a need for the proposed rule regulating waste treated seed."

Response: Prior to providing the estimate the commenter refers to, the agency emphasized in its presentation and verbal statements at the hearing that the rulemaking is mandated by the Legislature. The number included in the presentation was identified as an *estimated* volume and an *approximation*. While one commenter believed the number was too high, another commenter stated:

I actually feel that the 14,000-ton estimate is far short. We were actually working on an agreement, we had an agreement in hand that we were ready to sign before we realized that we had improperly qualified the treated seed fuel for our facility for 36,500 tons a year and ... they wanted to increase that amount in volume because they still had more need to dispose of seed. *See* hearing transcript, pg. 54, lines 5-12.

Regardless, the overall amount of waste treated seed generated in the state was not relied upon to support the need and reasonableness of the proposed rule. As included in the written materials and verbal statements during the hearing, the need for the proposed rule is established by the Legislature's mandate that the agency conduct this rulemaking. The exact amount of waste treated seed generated in the state is not known. For these reasons, it was not included in the SONAR. Additional justification for the need and reasonableness of the proposed rule is both generally and specifically contained in the SONAR.

Comment (Berger-3): Matthew Berger stated "As to the Minnesota Pollution Control Agency's legal premise on the need for the proposed rule, the agency previously stated that "[w]hile the Minnesota Department of Agriculture (MDA) and the U.S. Environmental Protection Agency (EPA) regulate the pesticides and fungicides that are used to treat seeds, treated seeds themselves are exempt from those requirements." MPCA, Waste Treated Seeds, https://www.pca.state.mn.us/get-engaged/waste-treated-seeds (last visited Mar. 24, 2025). This legal premise, however, is inaccurate and misleading.

Federal regulations enacted by the Environmental Protection Agency to implement FIFRA provide an exemption for treated articles and substances:

"The pesticides or classes of pesticides listed in this section have been determined to be of a character not requiring regulation under FIFRA, and are therefore exempt from all provisions of FIFRA when intended for use, and used, only in the manner specified.

(a) Treated articles or substances. An article or substance treated with, or containing, a pesticide to protect the article or substance itself (for example, paint treated with a pesticide to protect the paint coating, or wood products treated to protect the wood against insect or fungus infestation), if the pesticide is registered for such use."

40 C.F.R. § 152.25 (2024). In 2017, the Center for Food Safety filed a petition with the Environmental Protection Agency claiming that the agency did not adequately assess the risks from pesticide-treated seeds and that the treated article exemption did not cover such treated seed without an adequate assessment of those alleged risks. But as the EPA thoroughly explained in its response to this petition, the treated-article exemption to FIFRA is conditioned on the pesticide that was used to treat the seed being "registered for such use." See EPA, Response to the April 2017 Petition from Center for Food Safety and Others Related to EPA Regulation of Pesticide-Treated Seed ("EPA Response to Petition"), at 23, available at https://www.regulations.gov/document/EPA-HQ-OPP-2018-0805-0104 (Sept. 27, 2022).

In order for a treated article to satisfy this condition, "the presence of the pesticide in the article or substance [must] be the result of treatment using a pesticide registered for the use and requiring that the registered pesticide be expressly labeled for the precise use in question." *Id.* at 24-25. And before registering a pesticide with a label that authorizes use to treat seeds, the EPA must complete a "thorough assessment of the treating pesticide product, including any exposure and risk to human and ecological health from use of the treating pesticide and use of the treated article," to determine that the use of the pesticide in this manner "would protect 'man and the environmental from unreasonable adverse effects.' " *Id.* at 23 (emphasis added). Further, the "registered for such use" condition also requires that the distribution, sale, and use of the treated seed be "be consistent with any instruction on the registered pesticide product labeling, as communicated on the seed bag tag labeling." *Id.* at 39.

In other words, pesticide-treated seeds are not wholly exempt from the requirements of FIFRA or applicable state laws. Instead, the regulation of such treated seeds is necessarily part of, and subject to, the regulation of the pesticide that was used to treat the seed. Thus, the legal premise upon which the Minnesota Pollution Control Agency has commenced this rulemaking process is inaccurate—treated seeds, like other articles treated with pesticides, are already

regulated as part of the existing federal and state laws that regulate the pesticides used to treat the seeds.

Because treated seeds are already highly regulated, and because the Minnesota Pollution Control Agency has failed to establish either a factual or a legal need for the proposed regulation of waste treated seed, the proposed rule should not be adopted."

Response: The commenter quotes a prior high-level background statement published on an early version of the MPCA's WTS webpage, which was already revised in November of 2023, prior to the Second Request for Comments [48 SR 603] to more clearly and accurately reflect the MPCA's understanding of the regulatory status of waste treated seeds. The statement was clarified in response to comments received by the MPCA in response to the First Request For Comments [48 SR 243]. The text currently and since November, 2023, reads:

<u>Background</u>

Treated seeds are seeds, including grain, forage, oil-plant, and vegetable seeds, that have been treated with pesticides or fungicides. Treated seeds can usually be identified by their distinctive color. Federal law requires that a distinctive color be applied to seeds that are treated and sold.

While the Minnesota Department of Agriculture (MDA) and the U.S. Environmental Protection Agency (EPA) regulate the pesticides and fungicides that are used to treat seeds, treated seeds themselves are effectively exempt from the majority of those requirements. When planted normally for crops, treatments applied to seeds help them grow quickly and productively, and reduce the need for spraying or other application of agricultural chemicals.

However, if treated seeds cannot be planted for crops, they may need to be disposed of properly. Proper management of waste treated seed is important to avoid concentrating the small amount of chemicals on each seed and causing contamination or other environmental risks.

This statement was not included in the SONAR and it does not form the legal basis for the need for the rule. The commenter's conclusion regarding the applicable federal regulation of waste treated seed and the MPCA's statements regarding such is misplaced. The need for the proposed rule is established by the Legislature's mandate in the Session Law. Additional justification for the need and reasonableness of the proposed rule is both generally and specifically contained in the SONAR. The applicability of FIFRA is discussed correctly on pages 32-34 of the SONAR.

The MPCA further notes, though not discussed in the SONAR, that the EPA's interpretation of the treated article exemption from FIFRA as it had applied the exemption to treated seeds, as not subject to registration as pesticides under FIFRA and not subject to those pesticide regulations, was recently upheld by the U.S. District Court for the Northern District of California in November, 2024, in a case brought by the same claimants that had submitted the 2017 petition to the EPA referenced by the commenter. Therefore, though as discussed in the MPCA's response above not considered by the MPCA to form any legal basis for the need or reasonableness of the rule and not included in the SONAR, the MPCA believes that the text of the high-level background statement currently published on the MPCA's WTS webpage, and since November, 2023, is correct.

Comment (Berger-4): Matthew Berger stated "The Minnesota Pollution Control Agency Does Not Have Jurisdiction to Regulate the Use, Handling, Storage, Distribution, or Disposal of Treated Seeds.

As noted above, Minnesota law designated the Minnesota Department of Agriculture as "the lead state agency for the regulation of pesticides." Minn. Stat. § 18B.03, subd. 1. As part of this delegation, the Commissioner of Agriculture is specifically empowered to "administer, implement, and enforce" the laws codified in Minnesota Statutes chapter 18B, *id.*, including the new law that regulates the use, storage, handling, distribution, and disposal "of seed treated with pesticide," 2023 Minn. Laws ch. 60, art. 9, § 2 (codified at Minn. Stat. § 18B.075). Further, the Commissioner of Agriculture is directed by existing statute to "adopt rules to implement and enforce" the laws in Minnesota Statutes chapter 18B, including "rules to govern the distribution, use, storage, handling, and disposal of pesticides, rinsates, and pesticide containers." Minn. Stat. § 18B.06, subds. 1, 3 (2022). In other words, Minnesota law clearly delegates all authority over pesticides—including pesticide-treated seeds—to the Minnesota Department of Agriculture and not to the Minnesota Pollution Control Agency."

<u>Response</u>: Laws of Minnesota 2023, ch. 60, made several amendments to chapters 18B and 115A and section 21.86 at the same time, affecting authorities of both the Minnesota Department of Agriculture ("MDA") and the Minnesota Pollution Control Agency ("MPCA"), including the following:

- Created section 18B.075, creating management prohibitions on "seed treated with pesticide"
- Amended section 21.86 to prohibit certain actions with respect to "seed treated with neonicotinoid pesticide"
- Amended section 115A.03, to create a new definition of "waste treated seed"

- Created section 115A.993, prohibiting certain disposal practices with respect to waste treated seed.
- Required the commissioner of the MPCA, in consultation with the commissioner of MDA and the University of Minnesota, to adopt rules providing for the safe and lawful disposal of waste treated seed.

While Chapters 18 and 21 are administered by MDA, Chapter 115A is administered and enforced by the MPCA. These amendments, read together, show that the Legislature provided the MPCA with authority to regulate waste treated seed at the same time that it considered MDA's regulation of seed treated with pesticide. Moreover, the Legislature included a specific mandate for the MPCA to adopt rules providing for the safe and lawful disposal of waste treated seed, which provides the MPCA with clear authority to conduct this rulemaking related to waste treated seed.

Comment (Berger-5): Matthew Berger stated "Notwithstanding the clear delegation of authority over pesticides (including pesticide-treated seeds) to the Minnesota Department of Agriculture, the Minnesota Pollution Control Agency claims that it has statutory authority to adopt the proposed rules under Minnesota Statutes § 116.07, subdivisions 2(b), 2(d), 4(b), and 4(g) (2024). These provisions authorize the Minnesota Pollution Control Agency to regulate "solid waste" and "hazardous waste." The term "solid waste" is defined as follows:

"Solid waste" means garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges, in solid, semisolid, liquid, or contained gaseous form, resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include hazardous waste; animal waste used as fertilizer; earthen fill, boulders, rock; concrete diamond grinding and saw slurry associated with the construction, improvement, or repair of a road when deposited on the road project site in a manner that is in compliance with best management practices and rules of the agency; sewage sludge; solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents or discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended, dissolved materials in irrigation return flows; or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Minn. Stat. § 116.06, subd. 22 (2024). And solid waste is defined as follows:

"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. Categories of hazardous waste materials include, but are not limited to: explosives, flammables, oxidizers, poisons, irritants, and corrosives. Hazardous waste does not include source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Minn. Stat. § 116.06, subd. 11 (2024). Waste treated seed is not "refuse, sludge, or other waste material" and therefore does not satisfy the statutory definition of either "solid waste" or "hazardous waste"."

Response: "Waste treated seed" means seed that is treated, as defined in section 21.81, subdivision 28, and that is withdrawn from sale or that the end user considers unusable or otherwise a waste. Minn. Stat. 115A.03, subd. 37a. By its definition, waste treated seed is a waste and fits into the broad category of "other discarded waste materials," and is therefore regulated as a solid waste. It is also an "other waste material" under the plain meaning of those words. The regulatory status of waste treated seed is discussed on page 23 of the SONAR.

Comment (Berger-6): Matthew Berger stated "We understand that the Minnesota Pollution Control Agency has been placed in a difficult position as a result of the law enacted during the 2023 Legislative Session directing the MPCA to adopt rules "providing for the safe and lawful disposal of waste treated seed" and "identify[ing] the regulatory jurisdiction of state agencies and local governments with regard to such seed." 2023 Minn. Laws ch. 60, art. 3, § 28. Aside from significant constitutional questions regarding its validity, this law directly contradicts the existing laws that expressly delegate this authority to the Minnesota Department of Agriculture. Because of the untenable position in which this misguided law has placed the agency, we suggest that the proposed rulemaking should be limited to a rule that expressly identifies the Minnesota Department of Agriculture as the state agency that has exclusive regulatory jurisdiction over the use, storage, handling, distribution, and disposal of treated seeds as provided in Minnesota Statutes §§ 18B.03 and 18B.06. Any additional rulemaking would exceed the MPCA's legal authority and would be subject to legal challenge."

Response: The MPCA does not believe that a rulemaking as proposed by the commenter would satisfy the Legislature's mandate to the agency to promulgate rules providing for the safe and lawful disposal of waste treated seed. The majority of seed treatments borne by waste treated seed are pesticides, fungicides, or herbicides; substances intentionally designed to harm animal or plant life. When concentrated or released, all of these substances present a risk of endangering humans, food, livestock, fish, or wildlife. Establishing safe and lawful disposal

practices for such materials aligns with the MPCA's broad oversight over solid waste and hazardous waste. This includes management practices for landfills, compost facilities, and energy recovery facilities, all of which are regulated by MPCA under its existing rules.

Deferring regulation for disposal of waste treated seed to MDA would be contrary to the Legislature's clear direction to the MPCA to conduct this rulemaking. It would also contradict the additional concurrent amendments the Legislature made to Chapter 115A. Specifically, Laws of Minnesota 2023, ch. 60, amended section 115A.03 to add a new definition for waste treated seed that is distinct from the terms used in chapter 18B. The Legislature also established section 115A.993, which prohibits certain disposal practices for waste treated seed. The authority to regulate disposal of waste treated seed is therefore already within MPCA's statutory authority, which cannot be delegated to MDA by this rulemaking. In contrast, MDA has specific authority in section 18B.03, subd. 3 to delegate any regulatory duties of that chapter to officials of approved agencies. The MDA was consulted as directed by the Legislature as a part of developing this rulemaking and did not oppose the framework included in the proposed rule.

Comment (Berger-7): Matthew Berger stated "The Minnesota Pollution Control Agency Should Defer Any Rulemaking, Other than the Simple Rule Identifying the Minnesota Department of Agriculture as the State Agency with Regulatory Jurisdiction Regarding Treated Seeds, until After the Environmental Protection Agency Completes Its Rulemaking Process.

On October 12, 2023, the Environmental Protection Agency published an Advanced Notice of Proposed Rulemaking in which such agency indicates that it "is considering whether a rule under FIFRA to regulate certain use of treated seed and treated paint products or other administrative action is appropriate" based on concerns previously raised by citizens and several states. See 88 Fed. Reg. 70625. Because of the significant overlap of the issues identified in the federal notice and the state notice, and the risk that any rules adopted by the Minnesota Pollution Control Agency may conflict with or be preempted by federal rules that the EPA may adopt in the near future, we suggest that the MPCA should defer its proposed rulemaking—except as specifically required under the recently-enacted law that is described above—until after the EPA completes its rulemaking process."

Response: The Legislature directed the MPCA to conduct this rulemaking under the requirements of and by explicit reference to existing Minnesota Statues prescribing administrative rulemaking. The effect of Minn. Stat. § 14.125 required the MPCA to publish the proposed rule by December 31, 2024. The Legislature has not extended any discretion to the MPCA to consider or delay for speculative rulemaking potentially from the EPA or other federal agency. Federal Advanced Notice of Proposed Rulemaking (ANPR) are frequently followed by

intervals of several years or greater before even a proposed regulation may be published, and additional years intervals before any potential final regulation may be, if, promulgated; in addition, the EPA may also simply withdraw or indefinitely postpone an entire rulemaking following an ANPR. If a future rulemaking under FIFRA occurs, the MPCA will make an assessment regarding any potential conflict or preemption concerns at the time when and if such federal regulation is adopted.

G. Comments regarding MPCA's Pre-Hearing Comment Responses

Comment (Malfi-1, Hardy Kern-1, Rhoads-1): In a joint statement by the Xerces Society for Invertebrate Conservation, American Bird Conservatory, and the NRDC Action Fund, commenters stated "We agree that it is reasonable to limit burial of small quantities of WTS onfarm when solid waste service is not available. However, we ask MPCA to explain the basis for its assumption that only "small, isolated volumes" of seed will be buried on-farm and explain what constitutes a "small" and "isolated" volume. Furthermore, if MPCA is unable to determine what areas have "reasonable access to solid waste service," it should assume that on-farm burial will be widespread throughout the state and regulate on-farm disposal with this scope in mind. In other words, MPCA should take an extremely precautionary approach. To be clear, MPCA has ample authority to restrict—or even prohibit—on-farm burial of seed. On SONAR pg. 15, MPCA states: "Existing law also controls the allowance for on-farm disposal of solid waste to which two commenters objected. Waste treated seed would likely be considered "solid waste generated from the [...] farming operation" and must be allowed to be disposed on the farm site under Minnesota statutory law that the MPCA may not ignore." MPCA repeats this argument in its pre-hearing response to comments. Exhibit L, p. 1. The agency appears to reference Minn. Stat. § 17.135, which states that "a permit is not required from a state agency" for burial of "solid waste generated ... as part of a person's farming operation." Id. This statutory language states only that "a permit is not required," and does not prohibit MPCA from limiting or prohibiting burial of a substance considered solid waste. Indeed, MPCA rightly proposes restrictions of on-farm burial of treated seed in 7035.3700, subp. 4(A)(3). But MPCA has the authority to ensure that on-farm burial does not result in contamination of the environment, even if that requires a prohibition of on-farm burial."

Comment (Malfi-2, Hardy Kern-2, Rhoads-2): In a joint statement by the Xerces Society for Invertebrate Conservation, American Bird Conservatory, and the NRDC Action Fund, commenters stated "Setbacks from private wells - We maintain the position that MPCA should operate under the precautionary principle and require a setback distance of greater than 200ft for private wells that are used for drinking water. As MPCA acknowledges, we do not have data indicating how WTS generators typically distribute WTS during the burial process, nor the 4 volume that is typically buried in a single location. We maintain that the level of risk is

dependent on the quantity of seed that is being buried, the size of the area over which that seed is buried, and how that seed is distributed. Throughout the SONAR, the assumption is made that buried WTS present no greater risk than seeds planted on the farm. The MPCA appears to assume on-farm burial will be "... small, isolated volumes of waste treated seed." (Exhibit L, pg. 3). However, the proposed rule does not ensure this is the case. If there is a large quantity of WTS that a generator is permitted to bury on farm, that generator needs information on how best to distribute WTS to avoid harm to waterways and wildlife.

If MPCA is unable to help generators understand what a maximum volume per area should be for WTS, larger setbacks would help to account for this uncertainty and ensure they are sufficiently protective."

Comment (Malfi-3, Hardy Kern-3, Rhoads-3): In a joint statement by the Xerces Society for Invertebrate Conservation, American Bird Conservatory, and the NRDC Action Fund, commenters stated "In our initial comments, we suggested that it would be reasonable to prevent burial of seeds in areas where underlying aquifers are at moderate to high risk of contamination from overlying use. This recommendation was declined. Again, the MPCA appears to assume on-farm burial will be "... small, isolated volumes of waste treated seed." (Exhibit L pg. 3). However, nothing in MPCA's proposed regulations ensures this will be the case and there are no data indicating how WTS generators distribute WTS during the burial process, nor the volume that is typically buried. Indeed, MPCA acknowledges the lack of information available in its response to Section E comments in Exhibit L (pg. 6). MPCA also appears to suggest that setbacks cannot be calculated based on the boundaries of wellhead protection areas because those boundaries cannot be "identified as points on a map." To the extent that is MPCA's argument, it appears that a map of wellhead protection areas statewide, based on MDH data, is readily available on a University of Minnesota website. Whether or not these boundaries are defined by MPCA, it appears logical to prohibit WTS burial within these uniquely vulnerable areas."

Response: The MPCA believes that allowing conditional and safe on-farm disposal for farm-derived solid waste complies with the specific statutory direction for this rulemaking and preexisting statutory language. The MPCA determined that applying an increased setback distance of 1000 feet to all wells, including small, limited-use private wells, would effectively preclude burial on many farmlands in the state, contradicting the MPCA's understanding of the Legislature's directions. Wellhead protection areas are regulated and interpreted by the Minnesota Department of Health, not the MPCA. As discussed previously, the MPCA appropriately balanced the limited expected risk of burial of relatively small volumes of waste treated seed by a person operating land used for farming on that land with the burden and

regulatory uncertainty of applying delineations prepared for other reasons and applied setbacks of specific distances related to the relative risks.

The MPCA based its expectation on relatively small volumes of waste treated seed being buried on land used for farming by the person that owns or operates that land on the normal agricultural practices observed by and described to the MPCA that conserve planting seed, minimize wastage and unusable seed, and thus expectedly limit the volume waste treated seed. The MPCA is aware that treated seed is far costlier than untreated seed, and represents a major investment by persons owning or operating land used for farming. These observations and descriptions were further supported by the testimony of several commenters at the hearing, each of whom described in some detail the expense of purchasing treated seed and their practices to limit wastage.