SUBJECT: MOU between DATCP and DNR concerning Hazardous Substance Discharges

Attached is the final Memorandum of Understanding between DATCP and DNR concerning the discharge of hazardous substances signed by the Secretaries of both agencies. This memo is to inform program managers and staff of the MOU as well as to highlight new portions off this updated agreement. The MOU replaces the existing MOU from August of 1994. It was updated in part by the Legislative Audit Bureau recommendation to bring the MOU up to date with current statutes, rules and practices. We will conduct training for DNR staff in the future. At this point in time, we plan to invite DATCP staff as well as share training materials.

Background. Section 94.73, Stats, passed in 1993, established the Agricultural Chemical Clean up Program (ACCP) managed by the DATCP. The purpose of ACCP is to identify and assist in remediation of releases of pesticides and fertilizers. ACCP provides reimbursement for eligible cost incurred by parties conducting clean ups. A portion of the law, s. 94.73(12), Stats., requires DATCP and DNR enter into an MOU describing each agencies' functions in the administration of s. 94.73 Stats., to ensure corrective actions taken by DATCP are consistent with actions taken under s. 292.11(7) Stats.

Since the focus of this MOU is on the remediation and waste management activities related to agricultural chemical releases, other DNR regulations are not fully addressed in the MOU. We do reference certain related programs in the MOU and have shared portions of the MOU with the appropriate program. However, this MOU does not address all interagency issues that exist between DATCP and DNR.

The MOU applies primarily to pesticide and fertilizer release sites which are likely to include farm cooperatives and other sites where pesticides and fertilizers are mixed and loaded. The updated MOU identifies agency authorities, appropriate contact persons, how the agencies plan to coordinate response efforts, how each agency will address emergency response and non-emergency corrective action, and finally covers dispute resolution. The MOU provides for a clear understanding of the two agencies' roles in agricultural chemical remediation. The MOU does not cover pesticide or fertilizer manufacturing waste or to technical grade material (i.e. manufactured material not yet made into a pesticide formulation).

Several items were included in this MOU to bring it to date with current practices. The more significant of these include case close-outs issues, site remedial options, and issues involving land recycling. Each are discussed below. In addition, section VII is a discussion on lead agency responsibilities and communications and we also discuss instances where a coordinated lead is necessary. Our training will go over the complete MOU.

Case close-outs. Case closure requests will be evaluated by the lead agency. Cooperative lead cases will be reviewed for closure by each agency and may be closed by one agency before the other if incomplete work falls only within the jurisdiction of a single agency. When the non-lead agency has actively participated in case progression, the lead agency will provide the non-lead agency with the opportunity to participate in the closeout decision.
Closure cases where contaminated soil or groundwater have not been adequately removed must be included in DNR's Registry of Closed Remediation Sites (GIS Registry). DATCP has agreed to not issue closure letters to responsible parties until DATCP confirms that the DNR has received the appropriate GIS Registry processing fee and all items for the packet have been reviewed by DATCP staff for accuracy and completeness. Please see Section FV(F) for more information.

**Site remedial options.** A section has been added to the MOU dealing with site remediation options for management of media contaminated with pesticides and fertilizers. This section identifies landspreading or disposal as appropriate management techniques (please see Section V). In summary, the MOU allows for landspreading of contaminated material resulting from currently labeled pesticides as well as pesticides that are no longer registered provided the concentrations are below risk based residual concentration levels. DNR agrees that DATCP has the expertise and knowledge for the proper management of pesticides and fertilizers. The MOU requires that the DATCP administered landspreading program be followed for application of all pesticide-contaminated media. If not followed, then contaminated media is to be handled as a solid or hazardous waste.

In the eleven years since the last MOU was signed between our agencies, DATCP has formally established an effective regulatory program for the landspreading of pesticide contaminated media under ch. ATCP 35, Wis. Admin. Code. DATCP staff annually oversee numerous spill incidents of fertilizers or pesticides and as well as landspreading events from various remediation sites. Spill incidents may only involve one or two pesticides or fertilizers. However, the remediation cases may involve contamination from multiple agrichemicals.

Landspreading criteria for per ATCP 35, Wis. Admin Code and DATCP guidance includes securing an agreements with the landowner providing information on the site, the material to be spread, tillage, the use of fields; and submission of a post-application report. DATCP guidance also requires staff to inspect sites prior to the issuance of the written landspreading agreement to verify site information on the agreement form such as soil type, topographic features, ground slope, any evidence of high groundwater, wetlands and adjacent surface waters, and, the ability for the site to meet setback requirements.

Landspreading is not allowed in areas of potential high water table, adjacent to wells or surface water. Following landspreading, the media is incorporated into the top 6 inches of surface soil to reduce run-off chances and to promote reactions that break down pesticides such as microbial exposure.

In Section V of the MOU, DNR and DATCP have agreed on a multi-step approach for landspreading options of pesticides. Landspreading is allowed as follows:

- **Section V(B) - Landspreading of currently registered pesticides,**
- **Section V(C) - Landspreading of soil containing cancelled or suspended pesticides through compound-specific agreements** - These agreements have been prepared for dinoseb and cyanazine and are found in Attachment C, and
- **Section V(D) - Landspreading of soil containing cancelled or suspended persistent chlorinated and related pesticide compounds** - See Attachment E of the MOU for information on acceptable levels. For pesticides subject to V(C) and (D), DATCP and DNR have agreed to make use of the hazardous waste "contained out" provision and only allow for land spreading when pesticides are below a risk based residual concentration level for the pesticides of concern.
Land recycling cases. One type of cooperative lead case discussed in Section VII involves sites with land recycling actions. It is very important that particular attention be paid to these cases as the actions needed to comply with ss. 94.73 or 292.11(3) through (7), Stats., may differ from those necessary to obtain a DNR approval or letter under ss. 292.13 though 292.55, and ss. 75.105, 75.106, and 75.17, Stats. Examples of possible additional actions under these statutes include conducting phase one and phase two assessments, obtaining a certificate of completion under the voluntary party liability exemption (VPLE) process, pursuing cost recovery, or seeking general liability clarification.

Where a party is pursuing land recycling actions related to investigation and remediation of agricultural chemicals and may be seeking approvals, exemptions or letters under these various statutes, DATCP and DNR have agreed to early and frequent communication to coordinate review and comments on such approvals, exemptions and letters. Generally in these cases DATCP shall have jurisdiction in evaluating corrective actions requirements and DNR has jurisdiction in evaluating additional measures and issuance of approvals, exemptions and letters necessary for land recycling action. More detail is provided in subsection VII (B)(3)(b) of the MOU.

Follow-up. We will keep you informed of the training efforts undertaken. In the mean time, please share this with staff and contact Ed Lynch - RR/3 (608/266-3084) or Pat Chabot - WA/3 (608/264-6015) with questions.

The complete MOU and well as this memo are available at the following intranet link.
http://infranet.dnr.state.wi.us/iut/aw/rr/giiidance/RR5058.pdf

cc: (paper)
    Pete Flaherty - LS/5
    Ned Zuelsdorf / Duane Klein - DATCP (no attachment)

cc (electronic):
    RRMT
    RR staff statewide
    Steve Sisback - EE/5
    Duane Schuetpelz / Jeff Brauer - WT/2
    WAMT
    WA staff statewide
    Mark Putra - DG/5
MEMORANDUM OF UNDERSTANDING

Between the

Wisconsin Department of Agriculture, Trade & Consumer Protection
and
Wisconsin Department of Natural Resources

DISCHARGE OF HAZARDOUS SUBSTANCES

March, 2005
MEMORANDUM OF UNDERSTANDING
Between the Wisconsin Departments of Agriculture, Trade & Consumer Protection
And Natural Resources

DISCHARGE OF HAZARDOUS SUBSTANCES

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MEMORANDUM OF UNDERSTANDING
Between the Wisconsin Departments of
Agriculture, Trade & Consumer Protection
And Natural Resources

Related To
DISCHARGE OF HAZARDOUS SUBSTANCES

SECTION I: PURPOSE & SCOPE

(A) Purpose:
The purpose of this Memorandum of Understanding (MOU) is to maintain the framework of roles, responsibilities, coordination, conflict resolution, and contacts agreed to between the two agencies for corrective actions in response to discharges of agricultural chemicals as required by s. 94.73(12), Stats. This MOU is intended to better define agency roles in areas of possible overlapping authority related to discharges of agricultural chemicals. Specific sites may also need to comply with additional regulations of either agency that are not detailed in this memorandum. This MOU updates the August, 1994 MOU.

(B) Scope:
This MOU applies to discharges of pesticide products intended for use by private and commercial applicators and the general public, including historic discharges of pesticides that are now banned, cancelled or suspended, and fertilizers. These products and media contaminated with these products may also be hazardous wastes in some circumstances, as further defined in this MOU. The agencies agree this MOU does not apply to products that are not fertilizers or registered pesticides1 that are discharged at a pesticide manufacturing site.

SECTION II: DEFINITIONS

(A) "Agricultural Chemical" as used in this MOU has the meaning specified under s. 94.73 (1)(a), Stats.

(B) "Discharge" as used in this MOU has the meaning specified under s. 292.01(3), Stats.

(C) "Hazardous substance" has the meaning specified under s. 292.01(5), Stats.

(D) “Hazardous waste” has the meaning specified under s. 291.01(7), Stats.

(E) “Media” as used in this MOU, includes soil, surface water and ground water.

1 Registered as a pesticide by USEPA
"Nonhousehold pesticide" as used in this MOU has the meaning specified under s. 94.681(1)(c), Stats.

"Solid waste" has the meaning specified under s. 289.01(33), Stats.

SECTION III: CONTACT PERSONS

(A) **DATCP Program Issues**
    Containment and Remediation Section Chief.

(B) **DATCP Site Specific Issues**
    (1) **Emergencies:** The DATCP Spills Coordinator is the primary contact, and the DATCP Regional Field Investigator is the secondary contact (see DATCP map in Attachment A for field investigator assignments).
    (2) **Non-Emergencies:** The DATCP Containment and Remediation Section Chief is the primary contact.

(C) **DNR Program Issues**
    (1) **Solid and Hazardous Waste Generation and Management Issues:** Bureau of Waste Management, Policy Section Chief.
    (2) **All other Pesticide and Fertilizer Facility Issues:** Bureau for Remediation and Redevelopment, Fiscal and Information Technology Section Chief or the designee of the Bureau Director.
    (3) **Enforcement:** Office of Environmental Enforcement Director or Bureau of Law Enforcement Emergency Response Coordinator.

(D) **DNR Site Specific Issues**
    (1) **Emergencies:**
        (a) During normal business hours, the order of contact is:
            1. the DNR Regional Spills Coordinator,
            2. the DNR Madison Duty officer.
        (b) After hours, the DNR Madison Duty Officer is the primary contact.
    (2) **Non-Emergencies:** The DNR Regional Remediation and Redevelopment Team Supervisors are the initial contact, follow-up with the assigned technical staff. The DNR Regional Waste Team Supervisors are contacts for solid and hazardous waste issues.
(E) Communication and Program Operations
DATCP and DNR agree to exchange and update as needed, respective program organizational charts with the names and phone numbers of staff. Attachment A lists the current contacts.

SECTION IV: COORDINATING RESPONSE AND CLOSE-OUT EFFORTS
(A) Reporting and Recordkeeping
(1) Sharing Facility Records: Each agency will maintain records for the facilities and activities which it regulates. These records include reports required to be submitted by the regulated party and agency generated documents such as inspection reports. Each agency also requires those regulated to maintain certain records. DATCP and DNR agree to share information and utilize their inspection authorities when such records would assist the state in responding to a discharge of agricultural chemicals.

(2) Sharing Facility Listings: Each agency will maintain lists of regulated facilities and sites where soil and/or groundwater contamination is suspected or known from discharges of agricultural chemicals (the DNR lists also address other substances). Attachment B contains a current list and description of these databases, along with information on how they can be accessed. The agencies agree to update this attachment every three years and assist the other agency in obtaining information from these databases. Except for web accessible databases, each agency will provide the other agency with a current copy of these lists and updates when requested. DATCP agrees to provide DNR with data for updating the Bureau for Remediation and Redevelopment Tracking System (BRRTS) as mutually agreed upon.

(3) Communicating Reported Discharges: Pursuant to s. 292.11(2)(d), Stats., DNR shall notify DATCP of discharges of fertilizers and pesticides that are reported to DNR. Notification will routinely occur on the same business day or the next business day if reported outside normal office hours and will include all available information regarding the discharge. DNR shall assure that its immediate responders (wardens) and other spills staff are aware of DATCP's role in agricultural chemical discharges, and that DATCP should be promptly notified of the spill.

(4) Communicating Reporting Requirement: By means of routine inspections of sites covered by this agreement, DATCP staff will inform its regulated community of their responsibility to report discharges of hazardous substances to DNR in accordance with s. 292.11(2)(a), Stats. Reporting is not required for fully
MOU Between DATCP and DNR on Discharge of Hazardous Substances

contained releases into containment structures complying with ch. ATCP 29, 32 or 33, Wis. Adm. Code, or discharges exempt from reporting under s. NR 706.07, Wis. Adm. Code and s. 292.11(9)(d)2., Stats.

(5) Communicating Groundwater Results: The DNR Bureau of Drinking Water and Groundwater (DG) has the lead responsibility for monitoring of potable water supplies and informing well owners and users of the monitoring results. DATCP also samples and analyzes potable water supplies. Each agency will provide water sample results it generates to the well owner and the other agency. DATCP may request the DG to provide sampling support of these wells. The DG will notify DATCP if support can not be provided within the requested timeframe. DG will be responsible for liaison with the Wisconsin Department of Health and Family Services, local health departments, and other local officials on drinking water issues and monitoring results.

(B) Site Discovery

(1) Determination of Emergency: When an agency discovers soil or groundwater contamination that is caused by or is potentially related to discharges of agricultural chemicals, that agency will determine, based on preliminary data, whether an emergency situation exists or is imminent. Emergency situations are those in which there is an actual or imminent threat to public health, safety or the environment which requires an immediate action. In emergency situations, the discovering agency will proceed with an emergency response, in accordance with Section VI of this MOU.

(2) Non-Emergencies: If an emergency situation does not exist and is not imminent, the agency discovering the discharge shall gather the basic site information identified in s. NR 706.05(1)(c), Wis. Adm. Code, forward that information to the other agency and proceed according to Section VII of this MOU. Although spills will typically be reported the same business day under subsection (A)(3), this information will be forwarded within ten days of laboratory verification when the incident is discovered through some other agency investigation.

(C) Application of Natural Resources Rules

Response actions under this MOU by either agency shall be conducted in compliance with chs. NR 700, 706, 708, 712 through 726, and 140 and 141, Wis. Adm. Code, as applicable. Both agencies agree in implementing these response actions, that the lead agency for the specific response action will evaluate submittals for compliance with chs. NR 706, 708 and 712 through 726, Wis. Adm. Code. Responsible persons shall be

Guidance on the NR 700 rule series is available at http://www.dnr.state.wi.us/org/aw/rr/technical/index.htm
directed in writing to send submittals required under chs. NR 706, 708 and 712 through 726, Wis. Adm. Code, to the site lead agency, as designated by Sections VI and VII of this MOU. Responsible persons shall be further informed that the site lead agency will issue approvals and otherwise provide direction in response actions under chapters NR 706, 708 and 712 through 726, Wis. Adm. Code. This provision does not affect submittals, approvals or compliance determinations required under any other statutes or rules, even where required to complete a discharge response action.

(D) **Enforcement**

If full review under Section VII(D) is provided by the non-lead agency, then both agencies shall discuss an enforcement strategy, considering each agency's authorities, options, and responsibilities before initiating enforcement actions beyond a "Notice of Violation" or "Warning Notice". These discussions serve to keep both agencies notified and aware of the intended actions, promote coordination of timing, and avoid duplication of efforts. Both agencies will seek to maintain consistency with actions required of a responsible person by prior Warning Notices or Notices of Violations.

(E) **Use of Environmental Fund Appropriation – s. 20.370(2)(dv), Stats.**

1. The DNR will consider using Environmental Fund monies appropriated by s. 20.370(2)(dv), Stats., for use under s. 292.11 or s. 292.31, Stats., for discharges of agricultural chemicals resulting in soil or water contamination if the responsible party is unknown, unwilling or unable to undertake the necessary response action(s), and subject to the following conditions as outlined in Wisconsin’s Contingency Plan for Hazardous Substance Discharges:
   (a) The priority of the site justifies the use of state funds and commitment of DNR staff; and,
   (b) Sufficient funds and staff resources are available.

2. It is understood that:
   (a) The agencies will function under the cooperative lead approach described in Section VII(B)(3);
   (b) DNR is able to exercise its option to place the site on the U.S. Environmental Protection Agency’s (EPA) National Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list, thereby initiating potential federal Superfund action (including investigation and, if the site qualifies, cleanup);
   (c) DNR has the option to narrow the focus of the response action, pending the outcome of the initiated enforcement action or future Superfund action;
   (d) DNR will address cost-recovery issues when using funds from s. 20.370(2)(dv) Stats.; and
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(e) DNR will keep DATCP informed of any Superfund actions or RCRA Corrective Actions at any sites covered by this MOU, and will seek DATCP advice before and while proceeding.

(f) DNR may request assistance from the Environmental Protection Agency (EPA) Region 5, Emergency Response Branch to conduct a Federal-lead Superfund Removal Action.

(F) Case Close-outs

(1) General: Case closure requests will be evaluated by the DNR Regional Closeout Committee for DNR lead cases and by the DATCP Closeout Committee for DATCP lead cases. When the non-lead agency has actively participated in case progression, the lead agency will provide the non-lead agency with the opportunity to participate in the closeout decision. In such cases, the lead agency will provide the non-lead agency with the information contained in DNR Case Summary and Closeout Form (NR 4400-202) at least 30 days prior to a closeout review by the lead agency. Cooperative lead cases will be reviewed for closure by each agency and may be closed by one agency before the other if incomplete work falls only within the jurisdiction of a single agency. Cooperative lead closures will be discussed with the other agency in advance of closure actions and must clearly communicate to the responsible party and other interested persons the scope of the closure decision by that agency and the fact that other work outside of the jurisdiction of the agency issuing the case closure remains incomplete.

(2) Use of Soil and Groundwater Registries: Closure of cases where contaminated soil or groundwater have not been adequately removed must be included in DNR’s Registry of Closed Remediation Sites (GIS Registry). DATCP will not issue a closure letter to the responsible party until DATCP confirms that the DNR has received the appropriate GIS Registry processing fee and all items for the packet have been reviewed by DATCP staff for accuracy and completeness. DATCP will forward the complete GIS registry packet and its final closure letter to DNR upon final closure and DNR will subsequently record this data to its registry.

SECTION V: SITE REMEDIATION OPTIONS

(A) Landspreading Policy Agreement

(1) Categorizing Contaminated Media and Options: DATCP and DNR agree on the six procedures identified under (B)-(G) to manage agricultural chemical contaminated media at these discharge sites. Landspreading or disposal of these contaminated media are two common practices. The agencies agree that DATCP’s approval process under subsections (B) and (E) is the preferred remedy for media containing fertilizers or currently registered pesticides, and that
landspeading may be an appropriate practice for the management of certain media contaminated with cancelled pesticides. Subsections (C) and (D) allow for landspeading of media contaminated with these cancelled pesticides when identified criteria are met. Both agencies agree that the unique circumstances of historic lead arsenate use require management through a separate mechanism described in subsection (F). Subsection (G) addresses compliance with wastewater discharge permit requirements. This section does not apply to applications of liquids containing agrichemical residues recovered from spill containment systems, that are determined by DATCP to be pesticide or fertilizer use, and that comply with the label for pesticides and with generally accepted agricultural practices for fertilizers.

(2) Landspeading as Use: Where appropriate, DATCP will issue a permit to allow landspeading of agricultural chemical contaminated media. Landspeading of pesticide or fertilizer contaminated media will be regulated by DATCP in accordance with subsections (B) through (E). Media containing contaminants in addition to agricultural chemicals will be subject to applicable solid or hazardous waste management requirements of DNR.

(3) Waste determination: DATCP and DNR agree to use DNR’s hazardous waste “contained out” policy (see Attachment D) and allow for landspeading of agricultural chemical contaminated media which have limited concentrations of compounds that could be listed hazardous wastes. Media contaminated with suspended or cancelled pesticides that could be listed hazardous wastes are not subject to regulation as listed hazardous wastes if their concentrations are below residual concentration levels described in ch. NR 720, Wis. Adm. Code, and the media does not have other hazardous characteristics as defined in the NR 600 rule series. These excavated contaminated media are subject to regulation as solid waste or hazardous waste by DNR, under the NR 500 and NR 600 rule series, if not landspeaded in compliance with this MOU. In this situation, the initial point of contact at DNR is the Regional Waste Team supervisor.

(B) Landspeading of Soil Containing Currently Registered Pesticides
If media are contaminated with currently registered pesticides and landspeading is feasible, DATCP may issue a written approval to authorize landspeading in accordance with the process specified in s. ATCP 35.03, Wis. Adm. Code. Landspeading authorized by DATCP will be done on the same crop for which the pesticide contaminant is labeled and at or below label application rates and in accordance with generally accepted agricultural practices. DATCP may authorize one-time landspeading on non-labeled locations only if the landspeading will be of beneficial agricultural use and DATCP concludes the application will not result in adverse impacts to human health and the
environment. DATCP will not authorize landspreading under this subsection for contaminated media that:

(1) Exhibits a hazardous characteristic as described under hazardous waste rules unless that hazard is an intended characteristic of a currently registered pesticide contained in the media;

(2) Also contains a cancelled or suspended pesticide, unless landspreading of that pesticide is determined to be acceptable under subsections (C) or (D). Contaminated media containing cancelled or suspended pesticides may be landspread under this subsection if the cancellation or suspension notice allows use of existing stocks. Once the use of existing stock provision ends, then this material is subject to subsection (C) or (D).

(C) Landspreading of Soil Containing Cancelled or Suspended Pesticides through Compound Specific Agreements

In site-specific circumstances, media may be contaminated with cancelled or suspended pesticides. In these cases, landspreading may take place provided:

(1) Landspreading is feasible for that contaminated media,

(2) DATCP has issued a site specific written approval to authorize landspreading in accordance with the process specified in s. ATCP 35.03, Wis. Adm. Code; and,

(3) The cancelled pesticide is subject to an interagency compound specific agreement approved in writing by both DATCP and DNR. Included in Attachment C.2 and C.3 of this MOU as part of the initial agreement are compound specific agreements for Cyanazine and Dinoseb. At the request of DATCP, compound specific agreements will be prepared by staff from the two agencies for the approval of the Administrators for the DATCP Agricultural Resource Management Division and the DNR Air and Waste Management Division, or their designees. Any future compound specific agreements will be based on this agreement and the information shown in Attachment C.1. Future compound specific agreements will be identified as supplements to this MOU. Either agency may request that staff from the two agencies shall re-evaluate the criteria in any of the previously signed compound specific agreements if new information becomes available that may be relevant. Previously signed compound specific agreements may be terminated by either agency through the Conflict Resolution process outlined in Section IX.
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(4) If the criteria in a compound specific agreement under Attachment C can not be met, then the contaminated media can not be landspread without a site specific written agreement between DATCP and DNR.

(D) Landspreading of Soil Containing Cancelled or Suspended Persistent Chlorinated and Related Pesticide Compounds

(1) Agricultural chemical contaminated soils also commonly contain low level residues of cancelled or suspended persistent chlorinated pesticide compounds, resulting from past use. These soils may be landspread if the concentration of pesticides will not present a risk to persons or the environment, the media do not exhibit a hazardous characteristic; and the responsible party, in consultation with DATCP, determine the contamination is from intended use on the land of those cancelled or suspended pesticides and not the result of a product spill disposal, or from any spill or disposal at a facility that manufactured that pesticide. DATCP may permit landspreading of soils containing these residues, if DATCP, determines that the concentration of the pesticide is consistent with paragraph (2) and Attachment E. Risk will be minimized by limiting the landspreading rates to a maximum of 5% of historic annual use rate for DDT and historic single use application rates for other compounds.

(2) DATCP may permit landspreading of these contaminated soils without DNR review if:

   a. The contaminant concentrations in the excavated soils are less than or equal to the concentration resulting from the historic application rate as indicated in Attachment E.

   b. In determining the necessary acreage, the active ingredient (A.I.) application rate per acre will not exceed 5% of a historic single application rate, as indicated in Attachment E.

(3) If contaminant concentrations exceed those indicated in column B of Attachment E, DATCP may permit landspreading of contaminated soils, at application rates up to 5% of the historic application rate indicated in Attachment E, under a site-specific agreement with DNR. The site specific agreement will address:

   a. The maximum contaminant concentration allowed in excavated soils.

   b. Sampling requirements at the landspreading site, both before and after landspreading operations.

   c. Post landspreading requirements at the landspreading site including soil incorporation of landspread soil, maintenance of a vegetative cover, and use of subsequent crops from the site.
d. The format and approval process for this site-specific agreement will be consistent with the compound specific agreements discussed in subsection (C).

(4) DATCP will maintain a list of sites on which cancelled or suspended persistent chlorinated pesticide contaminated soils have been landspread, including the application rate and total mass landspread on the site. DATCP will provide this list to DNR upon request.

(5) DNR will advise DATCP on waste classification and disposition of contaminated soils containing cancelled or suspended persistent chlorinated pesticide compounds that can not be landspread under the provisions of this Section.

(E) **Landspreading of Soil Contaminated With Fertilizers**

Landspreading of soil contaminated with fertilizer in accordance with DATCP’s landspreading authorization will be viewed by both agencies as a beneficial use or reuse of a fertilizer, not disposal subject to solid or hazardous waste regulation provided that the contaminated soil is applied in accordance with generally accepted agricultural practices. Soil contaminated with fertilizer that can not be landspread is subject to solid waste regulations and may be subject to hazardous waste regulations.

(F) **Lead Arsenate**

Movement of soils at or from a property impacted by application, mixing and loading, or spills of lead arsenate pesticides will be managed under a separate interagency agreement being prepared by the DATCP, DNR and the Department of Health and Family Services – Division of Health. Agency responsibilities defined by that separate agreement will be carried out consistent with this MOU except as otherwise provided in that agreement.

(G) **Compliance With Wastewater Permit Discharge Requirements**

(1) Except as provided in par.(2), a responsible party must notify the DATCP Bureau of Agrichemical Management prior to landspreading, discharging, or disposing of any agricultural chemical contaminated wastewater generated by a remedial action at a discharge site, or any other pesticide containing wastewater that cannot be used as a product under par. (2). The DATCP will subsequently notify the DNR Bureau of Watershed Management to determine if the activity is subject to coverage under WPDES General Permit No. WI-0046566-4, or whether an individual WPDES permit is necessary.

(2) Notification of DNR and WPDES permit coverage is not required for landspreading water contaminated with agricultural chemicals that is managed as a pesticide or fertilizer product and subsequently used consistent with pesticide product label directions, or according to normal nutrient management practices.
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for fertilizer products. This paragraph applies to rinsates, accumulated rainwater and product spills recovered from spill containment systems under ch. ATCP 29, 32 or 33, and subsequently used as an agricultural chemical product consistent with pesticide product label directions, or according to normal nutrient management practices for fertilizer products, provided the product is managed in compliance with state and federal pesticide law. This paragraph also applies to pumped, contaminated groundwater when used as an agricultural chemical product consistent with pesticide product label directions, or according to normal nutrient management practices for fertilizer products, provided that DATCP has issued a landspreading permit to the responsible party. This paragraph does not apply to pesticide mixtures that cannot be used consistent with pesticide product label directions because they contain concentrations of pesticides with differing allowable use sites that exceed federal cross-contamination standards for pesticides under Pesticide Registration Notice 96-8 issued by the USEPA on October 31, 1996. Further, this paragraph does not allow direct discharge of contaminated waters to land adjacent to spill containment systems without authorization under a WPDES permit.

SECTION VI: EMERGENCY RESPONSE

(A) General

Emergency situations are those in which there is an actual or imminent threat to public health, safety or the environment which requires an immediate response. DNR is the lead agency for emergency response. DATCP may respond to an emergency and take those actions necessary to contain the site and mitigate any immediate threat until DNR responds. The objective of emergency response actions are: to protect life, drinking water supplies, surface water bodies and property; to identify and control the source of the discharge; and to prevent and abate the migration of the discharge. DNR will be responsible for completing the DNR spill form when notified by DATCP.

(B) Initial Discovery by Either DATCP or DNR

When either DATCP or DNR is the first agency contacted or the first agency to discover or respond to an emergency situation, its emergency response actions will consist of the following:

(1) Promptly (typically the same day) notify the other agency of the discharge and discuss and coordinate actions required at the site.\(^3\)

\(^3\) DATCP will notify the DNR regional spill coordinator or contact the Madison Duty Officer (Spills Hotline 24 hour Phone Number: 1(800)943-0003). DNR will notify DATCP by calling the DATCP spill coordinator.
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(2) Collect information regarding chemicals, quantities, and other pertinent information as needed in order to identify the pesticide and/or fertilizer substances involved and assess their immediate hazards;

(3) Identify immediate and short-term requirements to stop the discharge and contain discharged materials;

(4) Provide the responsible party or its contractor with recommendations on a plan of action designed to address containment, recovery of discharged materials and any contaminated media, product/waste storage and disposition, security, and other issues needing prompt or immediate attention;

(5) Provide all pertinent information to the other agency for identifying the substances of concern and the hazards posed by them;

(6) Discuss and coordinate emergency response actions, and provide technical assistance on requirements needed to address and remediate long-term impacts from the discharge; and,

(7) Coordinate with other emergency responders such as local police and fire departments that may also be present taking priority action regarding protection of life and property.

(C) DNR Immediate Response Responsibilities
In situations where DNR is the immediate responder, it is also responsible for taking the following actions:

(1) When necessary, determine the appropriate use of the Environmental Fund per Section VII(B)(3);

(2) Contract with a private contractor to provide remedial response actions to mitigate the emergency if the responsible party is unknown, unwilling or unable to adequately respond following procedures outlined in the spill response manual; and

(3) Provide DATCP with technical assistance on the classification of wastes generated.

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4 DNR staff invoking this contract follow their regional spill response manuals. Other agencies may also invoke the contract to provide emergency response actions if a responsible party is unknown, unwilling or unable to adequately respond. Information on the current contract may be obtained from Mr. James Nelson, Administrator of the Bureau of Procurement, Department of Administration, 101 East Wilson Street, Madison, Wisconsin. (608/266-2313)
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(D) **DATCP Immediate Response Responsibilities**

In situations where DATCP is the immediate responder, it is also responsible for taking the following actions:

1. Provide DNR with sampling assistance and analytical support for soil or residue samples needed to assess hazards posed by the discharge, where convenience, costs or other issues make DATCP capabilities preferable to private contractors;

2. Determine the presence and concentration of potentially significant pesticide or fertilizer compounds in any soil or ground water for determining clean-up levels and the beneficial use of contaminated media; and

3. DATCP may request DNR to reimburse costs associated with sample analysis conducted by DATCP under par. (1). Reimbursement may only be provided if there is an agreement between the agencies prior to sample collection analysis.

SECTION VII: NONEMERGENCY CORRECTIVE ACTION

(A) **General**

Both agencies agree to provide a coordinated and timely response which will take advantage of existing agency expertise, facilitate environmental protection and promote voluntary compliance at sites where an emergency has been addressed or where one does not exist at the time. Both agencies recognize that one facility may be contaminated by both agricultural chemicals and other compounds. Experience has shown in most cases these contaminants are not co-mingled in soils nor jointly remedied in groundwater, and that cases progress more efficiently if consultants work independently with each agency. Nevertheless, there may be instances where it is most reasonable to have one or the other agency take the lead on all contamination at a given facility, or for the agencies to coordinate actions through a Cooperative Lead under subsection (B)(3).

(B) **Lead Agency and Site Lead Determinations**

1. **DATCP Lead Designation:** Except as otherwise provided for by this MOU, DATCP is the lead agency for corrective actions for discharges of agricultural chemicals. DATCP may request that DNR take the site lead on a site where DNR's technical expertise, statutory authority or site specific experience best represent the needs for the site. If DATCP requests that DNR serve as the site lead, DNR will notify DATCP within 14 days whether DNR is willing to serve as the site lead. If DNR declines the site lead role, DATCP shall maintain lead responsibilities or proceed according to par. (5).

2. **DNR Lead Designation:** DNR may request that DATCP take the lead on a site where DATCP's technical expertise, statutory authority or site-specific experience
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best represent the needs for the situation. If DNR requests DATCP serve as the site lead, DATCP will notify DNR within 14 days whether DATCP is willing to serve as the site lead. If DATCP declines the site lead role, DNR shall maintain lead responsibilities or proceed according to par. (5). In accordance with the authority in s. 94.73 (2m) (b) and (e), Stats., DNR is the lead agency on the sites referenced below:

(a) Major discharges to surface waters of the state.
(b) Sites involving abandoned containers of agricultural chemicals if the responsible party is unknown.
(c) Except as provided under Section V(C), (D) and (F), discharges of pesticide products prohibited from use under s. 94.707(1) at facilities that are storing these pesticides for disposal.
(d) Discharges of household pesticides and industrial pesticides, as defined in s. 94.681(1)(a) and (b), Stats.
(e) Discharges from solid or hazardous waste treatment, storage and disposal facilities licensed or regulated by DNR. For purposes of this paragraph, “treatment, storage and disposal facilities” does not include sites or discrete areas of contamination resulting from releases of agricultural chemicals that occurred solely as an incidental component of agricultural chemical mixing and loading operations.
(f) Sites at which the DNR is taking corrective action pursuant to hazardous waste contamination under s. 291.37(2), Stats. For purposes of this paragraph, this lead does not include areas of contamination resulting from releases of agricultural chemicals that occurred solely as an incidental component of agricultural chemical mixing and loading operations.
(g) DNR shall have the lead in issuing approvals, exemptions and letters for land recycling actions when such an approval, exemption or letter is requested as described in par. (3)(a).

(3) Cooperative Lead Cases: Some cases will require ongoing interaction of both agencies throughout the progress of the case. In these cases, the agencies may agree to each identify a project manager who will jointly agree on the primary roles and responsibilities to be fulfilled by each agency at the outset of the case and at appropriate transition points as the case progresses. The project managers will be responsible for case documentation, intra-agency communication and exchange of information, communication with the responsible party, and tracking case progress for those case components for which the individual agency is responsible. On those case components where both agencies play an active role, the agencies will assure their correspondence with the responsible person reflects this two-agency involvement and directs the responsible person to provide documentation to both agencies. Those cases where cooperative leads are anticipated, and the expected primary roles of each agency include:
MOU Between DATCP and DNR on Discharge of Hazardous Substances

(a) Land Recycling Actions: The actions needed to comply with ss. 94.73 or 292.11(3) through (7), Stats., may differ from those necessary to obtain a DNR approval or letter under ss. 292.13 though 292.55, and ss. 75.105, 75.106, and 75.17, Stats. A few examples of possible additional actions under these statutes include conducting phase one and phase two assessments or obtaining a certificate of completion under the voluntary party liability exemption (VPLE) process, pursuing cost recovery under s. 292.35, Stats. or seeking general liability clarification under s. 292.55, Stats. Where a party is pursuing land recycling actions related to investigation and remediation of agricultural chemicals and may seek approvals, exemptions or letter under ss. 94.73 and 292.13 though 292.55, and ss. 75.105, 75.106, and 75.17, Stats., DATCP and DNR agree to early and frequent communication to coordinate review and comments on such approvals, exemptions and letters. Generally in these cases DATCP shall have jurisdiction in evaluating which corrective actions are necessary to comply with ss. 94.73, 292.11(3), (4) and (7)(c), Stats., and DNR shall have jurisdiction in evaluating additional measures and issuance of approvals, exemptions and letters necessary under ss. 292.13 through 292.55, and ss. 75.105, 75.106, and 75.17, Stats.

(b) Use of Environmental Fund Appropriation s. 20.370(2)(dv), Stats.: Use of the environmental fund appropriation may occasionally become necessary to accomplish those corrective actions deemed necessary by the agencies. DNR has jurisdiction in evaluating whether the circumstances of any particular case justify use of environmental funds under s. 292.11 or 292.31, Stats. In those circumstances where DNR has determined that use of the environmental fund is appropriate, the agencies shall jointly determine which corrective measures will be taken. DATCP has jurisdiction in determining whether any costs incurred directly by the responsible party or recovered from the responsible party under s. 292.11(7)(b) or 292.31(8), or 292.81, Stats., are eligible for reimbursement under s. 94.73, Stats.

(c) Site Contaminated by Hazardous Substances in addition to Agricultural Chemicals. The agencies agree to work together to formulate a single remedy for these sites using authorities of both agencies. Both agencies will actively participate in all investigative or remedial actions related to areas of overlapping soil or groundwater contamination, unless either agency concludes their component of the contamination in the over-lap area does not require any corrective measures. Notwithstanding this, both agencies shall still consider the impacts of over-lapping contamination on any soil or water removed for use, treatment or disposal. Both agencies will attempt to coordinate placement and use of monitoring wells, timing of soil excavation and other activities where coordination is advantageous to either agency or the responsible party.
and not detrimental to these parties or the environment. In general, where the corrective actions associated with agricultural chemicals may be eligible for reimbursement under s. 94.73, Stats., DATCP will have jurisdiction in evaluating corrective measures necessary to investigate and remedy the agricultural chemical contamination. DNR will have jurisdiction in evaluating corrective measures necessary to investigate and remedy the other hazardous substances.

(4) Assignment of Site Lead:
(a) The agencies agree to determine the site lead at the following points:
   1. Upon reporting of a discharge under Section IV(A)(3),
   2. Upon completion of an emergency response under Section VI,
   3. Upon discovery of a discharge by either agency under Section IV(B)(2).

(b) If staff do not concur on a site lead decision, the dispute resolution process under Section VIII will commence within 14 days to either agree upon site lead or identify additional information that is necessary to determine site lead and how this information should be collected.

(5) No Active Review: It is also understood that given staffing levels and priorities for both agencies, some sites may not be actively reviewed by the agency determined to have the lead authority under pars. (1) through (3). For those sites, the responsible party, if one exists, will be directed by the lead agency to proceed with the corrective action. The lead agency is responsible for developing and maintaining a tracking system to document the progress and timeliness of the investigation and clean up for all sites for which they are lead regardless of whether a site is actively reviewed.

(6) DATCP Review Under s. 94.73(4), Stats.: Regardless of lead determination, DATCP may provide work plan review and comment to comply with s. 94.73(4)(a), Stats.

(C) Lead Responsibility
The site lead agency will contact the responsible party, and meet as appropriate to discuss the requirements and the proposed time schedule for investigation and clean-up. The site lead agency will also assure coordination with the non-lead agency as described under subsection (D), and will incorporate timely review comments from the other agency in correspondence with the responsible party or provide an explanation to the non-lead agency as to why the comments were not incorporated. In contacting the responsible party, the site lead should indicate any coordinating efforts of the two agencies and identify the site lead as the primary contact. Any correspondence should also identify specific concerns and requirements of the agencies and inform the responsible party on
how to proceed. To maintain eligibility for reimbursement under s. 94.73(3) and (4), Stats., DATCP must approve any work plan within 30 calendar days of submittal, regardless of the site lead designation. Where DNR is the site lead and corrective action costs may total more than $7,500, a work plan approval shall either be signed by both agencies or DNR shall notify the responsible party that work plan approval by DATCP is required. DATCP may incorporate or reference DNR's technical review and approval in its approval under s. 94.73(4), Stats.

(D) **Review and Correspondence**

Both agencies will provide information and documents requested by the other agency and may provide review comments related to response actions at sites involving discharges of agricultural chemicals. At the time the site lead agency is selected, the non-lead agency shall identify the level of correspondence and review of draft and final documents it wishes to maintain on the case. Paragraphs (1) through (3) provide default review levels. The level of review shall be discussed on a site-specific basis for sites with water supplies contaminated with agricultural chemicals for which no groundwater standards exist.

When draft and final documents are requested, they shall be provided in a timely manner. Site specific information necessary for BRRTS database management will be tracked and exchanged in accordance with Section IV(A)(2). The site-specific contacts identified in Section III(D) of this MOU shall provide and receive the preliminary evaluation and correspondence related to site lead determination. Other pertinent site-specific correspondence regarding sites covered under this agreement will be provided as they are generated, to the person designated by the primary contact. The DNR Bureau of Drinking Water and Groundwater and the applicable Regional Water Leader shall receive copies of all correspondence relating to public and private wells including well construction and well water quality. DNR will incorporate this data into the Groundwater Retrieval Network.

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5 To comply with this requirement, the lead agency shall promptly furnish the other agency with a copy of each work plan for comment. Within 14 days after receiving a copy of the work plan, the DATCP or DNR may provide any comments on the work plan. DATCP comments shall be forwarded to the responsible person within 30 days.)
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(1) **Review by DNR of DATCP Lead Sites:**
(a) DATCP will provide for full review by DNR of response actions taken or planned at any sites where DATCP is the site lead and public water supplies have been impacted over a preventive action limit, or where such impacts appear imminent. DATCP shall assure that DNR receives all reports, work plans and other correspondence promptly for these sites (e.g., within 3 calendar days). DATCP will provide 14 calendar days for DNR to review work plans and provide comments to DATCP.

(b) DATCP will provide DNR with copies of correspondence for sites where private water supplies are impacted over a preventive action limit, or where such impacts appear imminent. Correspondence will routinely be provided in final form and need not include copies of work plans and reports.

(c) DATCP will provide information to DNR for tracking purposes of case initiation and case close-out for all other sites covered by this MOU.

(2) **Review by DATCP of DNR Lead Sites:**
(a) DNR will provide for full review by DATCP of response actions taken or planned at any of the following sites where DNR is the site lead. DNR shall assure that DATCP receives all reports, work plans and other correspondence promptly for these sites (e.g. within 3 calendar days). DNR will provide 14 calendar days for DATCP to review work plans and provide comments to DNR.
   1. Sites where DATCP has requested DNR serve as the site lead under s. 94.73(2m)(b), Stats.
   2. Sites involving contamination from agricultural chemicals.

(b) DNR will provide DATCP with copies of correspondence for the following sites. Correspondence will routinely be provided in final form and need not include copies of work plans and reports, unless copies are received earlier to review potential reimbursement as noted under subsection (C):
   1. Sites involving major discharges to surface water.
   2. Sites involving discharges of pesticides that are not agricultural chemicals as described in Section IX of this agreement.
   3. Corrective actions at hazardous waste sites that could be eligible for reimbursement under s. 94.73, Stats.

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6 DNR anticipates charging fees where appropriate when the responsible party is seeking a DNR review or letter. For instance, if DNR assists DATCP in review of a work plan, there would not be a fee charged. However, if the responsible party requests DNR review for the purpose of obtaining an NR 749 letter, then DNR would expect to charge a fee.
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(c) DNR will provide notice to DATCP of case initiation and case close-out on the following sites.
   1. Immediate spill response actions involving pesticides that are not agricultural chemicals.
   2. Actions involving abandoned containers of agricultural chemicals.

SECTION VIII: HOUSEHOLD AND INDUSTRIAL PESTICIDES
Household and industrial pesticides are not agricultural chemicals, but are of mutual concern to DATCP and DNR, since both agencies regulate aspects of these products and their wastes. DNR will normally maintain lead responsibility for sites contaminated with these pesticides. DNR may request that DATCP take a lead role on household or industrial pesticide discharge response actions where such a change in lead role best serves the interests of both departments. Both agencies agree to provide information to each other consistent with Sections I through VII and will provide for review of response actions by the other agency, if requested.

SECTION IX: CONFLICT RESOLUTION
(A) Site Specific Issues
In the event a disagreement over a site specific issue pertinent to this agreement occurs, the DATCP Containment and Remediation Section Chief and the DNR Regional Remediation and Redevelopment Team Supervisor and, if appropriate, the DNR Regional Waste Program Team Supervisor and DNR enforcement staff, shall meet with staff assigned to the site to resolve the issue. DNR and DATCP Bureau Directors will be notified of the times, dates, locations and issues to be resolved at dispute resolution meetings. If the issue cannot be resolved at this level, the matter shall be elevated to the appropriate DATCP Bureau of Agrichemical Management Director and the DNR Regional A&W Leader. The appropriate DNR Bureau Directors will also be invited to participate. In the event that the issue cannot be resolved at this level, the division administrators of the DATCP Division of Agricultural Resource Management and the DNR Division of Air and Waste will attempt to reach a mutual agreement. The Secretaries of each Department are the final arbiters of any dispute. Unresolved issues will be forwarded to the next level in a timely manner (typically within 30 days of a decision at the prior level). Within 30 days of the decision being made on the disputed issue, the lead agency will prepare a position paper on the specific decision for sign-off by both agencies.

(B) Program Issues
In the event a disagreement occurs over a programmatic issue which is pertinent to this agreement but is not site specific, the respective DATCP and DNR Section Chiefs and one regional team supervisor shall meet to resolve the issue. In the event the issue cannot be resolved at this level, the matter shall be elevated to appropriate DATCP and DNR Bureau Directors. If the issue remains unresolved, the division administrators of the DATCP Division of Agricultural Resource Management and the DNR Division of Air
and Waste will attempt to reach a mutual agreement. The Secretaries of each Department are the final arbiters of any dispute. Within 30 days of the decision being made on the disputed issue, the lead agency will prepare a position paper on the specific decision for sign-off by both agencies.

SECTION X: REVIEW AND MODIFICATION
This MOU has been developed by mutual cooperation and consent, and hereby becomes an integral part of the working relationship between DATCP and DNR. DATCP and DNR agree to provide each other with prompt notice of changes to the statutes, administrative rules, and guidance, and practices that may impact both the agencies and this MOU. Each agency shall make copies of this agreement available to appropriate staff. This agreement shall be reviewed by DATCP and DNR at least biennially to update agency contacts and organizational structures and determine whether other modifications are necessary.

This MOU shall commence upon its signing by both agencies and shall continue to be in effect until termination. It shall be reviewed at the request of either agency and may be terminated by either agency following the Conflict Resolution process outlined in Section IX.

For the Wisconsin Department of Agriculture, Trade and Consumer Protection

Rodney J. Nilsestuen, Secretary  
Department of Agriculture, Trade and Consumer Protection  

Date 3-14-05

For the Wisconsin Department of Natural Resources

Scott Hassett, Secretary  
Department of Natural Resources  

Date 3-18-05
MOU Between DATCP and DNR on Discharge of Hazardous Substances

ATTACHMENT A
DATCP and DNR Contacts – February, 2005

DATCP
Bureau of Agrichemical Management Director - Ned Zuelsdorff (608/224-4550)
Containment and Remediation Section Chief - Duane Klein (608/224-4519) (Also Enforcement Contact)
Spills Coordinator – Matt Laak (608/224-4518)
See attached map for DATCP Field Investigator Assignments
Also at: http://www.datcp.state.wi.us/arm/agriculture/pest-fert/pesticides/accp/ees_staff.html
DATCP Field Investigators are field investigators, located throughout Wisconsin, assigned to long-term cleanup projects and landspreading contaminated soil.

Kevin Brey
3610 Oakwood Hills Parkway
Eau Claire, WI 54701-7754
715-839-1641

Steve Buchanan
N3829 Highway 22
Montello, WI 53949
608-297-2274

Art Fonk
819 North 6th Street - Room 99
Milwaukee, WI 53203
414-278-0119

Steve Buchanan
3610 Oakwood Hills Parkway
Eau Claire, WI 54701-7754
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2811 Agriculture Drive
PO Box 8911
Madison, WI 53708-8911
608-224-4532

Corinne Ness
1518 1/2 11th Street
Monroe, WI 53566
608-329-4477

John Peters
200 N. Jefferson Street - Suite 146A
Green Bay, WI 54301
920-448-5102

Lenny Weiss
437 Milwaukee Avenue
Burlington, WI 53105
262-763-7987

Mike Brown
373 W. 6th St., Suite C
Richland Center, WI 53581
608-647-3008

Vacant
2129 Jackson Street
Oshkosh, WI 54901
920-232-5605

Bob Gutknecht
1200 Lakeview Drive - Suite 160
Wausau, WI 54401
715-845-6407

Gary LeMasters
820 Industrial Drive
Sparta, WI 54656
608-366-1190

John Morris
Washburn County Law Enforcement Center
1341 2nd Ave.
P.O. Box 397
Cumberland, WI 54829
715-822-3945

Liz O’Donnell
2811 Agriculture Drive
PO Box 8911
Madison, WI 53708-8911
608-224-4531

Jeff Saatkamp
141 NW Barstow Street - Room 404
Waukesha, WI 53188
262-524-3959

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DNR Contacts

Central Office
Bureau for Remediation and Redevelopment Director - Mark Giesfeldt (608/267-7562)
   Ed Lynch (608/266-3084)
Bureau of Waste Management Director - Suzanne Bangert (608/266-1327)
   Policy Section Chief – John Melby (608/264-8884)
Bureau of Drinking Water and Groundwater Director – Jill Jonas (608/267-7545)
Bureau of Watershed Management – Jeff Brauer, Environmental Engineer – (608/267-7643)
Office of Environmental Enforcement Director – Steve Sisbach (608/266-7317)
Law Enforcement Emergency Response Coord. – David Woodbury (608/266-2598)
DNR Madison Duty Officer - 1-800-943-0003

DNR Contacts

Regional Contacts - See attached map identifying DNR Regions

Northern
Air and Waste Leader - Mark Stokstad (715/365-8911)
Remediation and Redevelopment Team Supervisor – John Robinson (715/365-8976)
Waste Team Supervisor – Connie Antonuk (715/365-8946)
Water Leader – Tom Jerow (715/365-8901)
Spills Coordinator – Norm Dunbar (715/365-8963)

West Central
Air and Waste Leader - Thomas Woletz (715/839-3756)
Remediation and Redevelopment Team Supervisor - Bill Evans (715/839-3710)
Waste Team Supervisor – Dave Lundberg (715/839-3708)
Water Leader – Dan Bauman (608/785-9014)
Spills Coordinator – John Grump (715/839-3775)

Northeast
Air and Waste Leader - David Hildreth (920/492-5820)
Remediation and Redevelopment Team Supervisor - Bruce Urben (920/492-5860)
Waste Team Supervisor – Len Polczinski (920/492-5870)
Water Leader – Charlie Verhoeven (920/492-5831)
Spills Coordinator – Roxanne Chronert (920/492-5592)

South Central
Air and Waste Leader - Joe Brusca (608/275-3296)
Remediation and Redevelopment Team Supervisor - Pat McCutcheon (608/275-3241)
Waste Team Supervisor – Gene Mitchell (608/275-3466)
Water Leader – Margie Devereaux (608/275-3310)
Spills Coordinator – Ted Amman (608/275-3332)

Southeast
Air and Waste Leader - Lakshmi Sridharan (414/263-8512)
Remediation and Redevelopment Team Supervisor- Jim Schmidt (414/263-8561)
Waste Team Supervisor – Frank Schultz (414/263-8694)
Water Leader – Charles Krohn (414/263-8514)
Spills Coordinator – Scott Ferguson (414/263-8685)
DATCP Databases

Licensed Fertilizer and Pesticide Facilities: DATCP licenses commercial pesticide application businesses. Examples of entities on this list are agricultural coops and farm centers, lawn care companies, structural pest control companies, plus a number of less common pest control firms, such as aquatic, right-of-way and bird control businesses. The agricultural entities likely also have licenses to sell restricted-use pesticides and fertilizers. The list identifies Wisconsin locations and very general information about each operation. They are maintained in DATCP’s Case Tracking System.

Contact: Lori Bowman  lori.bowman@datcp.state.wi.us  608/224-4542

Longterm Cleanup Sites: As part of its Agricultural Chemical Cleanup Program, DATCP maintains a database of all active and closed cases where soil or groundwater contamination appears to be related to discharges of agricultural chemicals. The majority of these cases are places where fertilizers or pesticides were mixed and loaded at storage facilities, such as agricultural coops and farm centers. Additional but less common types of facilities include farms, nonagricultural pesticide application businesses, golf courses and former orchard mixing/loading sites. This data is maintained in DATCP’s Case Tracking System and includes the site name and location, the case status and limited additional detail for open cases.

Contact: Duane Klein  duane.klein@datcp.state.wi.us  608/224-4519

Spills: Also part of the Agricultural Chemical Cleanup Program, DATCP tracks acute spills (discharges) involving agricultural chemicals. This data set tracks the DATCP responses to the spills reported through DNR regional spills coordinators and the state spills hotline, including any spills that are first reported to DATCP, where information is then forwarded to the DNR spills contacts. On occasion, particularly severe spill cases become long-term cases and may be tracked as a Longterm Cleanup Site (see above).

Contact: Matt Laak  matt.laak@datcp.state.wi.us  608/224-4518

Groundwater Cases: DATCP tracks all occurrences of pesticides in groundwater as a subset of the DNR groundwater database, with additional detail for many of these detections. As a further measure, DATCP conducts an investigation of each groundwater detection in a private or public water supply that exceeds an enforcement standard for any pesticide. These investigations are called groundwater cases and the investigation is tracked in DATCP’s Case Tracking System. In cases where the investigation concludes that a discharge of an agricultural chemical has resulted in groundwater contamination or may still be contributing to the groundwater contamination, the case may be tracked as a Longterm Cleanup Site (see above).

Contact: Jim VandenBrook  jim.vandenbrook@datcp.state.wi.us  608/224-4501

Lead Arsenate Sites - Database of pre-1960 orchard locations. These sites are of concern because, prior to 1960, lead arsenate was frequently used on orchards and significant levels of lead and arsenic may remain on these properties. Many of these sites have been, and are being developed as residential properties. Information in this database includes:

- Clickable map of Wisconsin that identifies pre-1960 orchard locations.
- Aerial photos showing locations that we have identified as old orchards.
- Confidence level indicating the likelihood of an orchard existing on a property.

Contact: Duane Klein  duane.klein@datcp.state.wi.us  608/224-4519
DNR Databases

The Wisconsin Department of Natural Resources (DNR) maintains several lists of contaminated sites and solid and hazardous waste facilities that are available to the public. The DNR’s Remediation and Redevelopment (RR) Program as well as the Waste Management Program maintain several of these lists (highlighted below), including Superfund sites, hazardous substance spills (discharges), sites with leaking underground storage tanks, sites undergoing investigation and cleanup, as well as lists of facilities that generate hazardous waste and treat, store and dispose of solid and hazardous wastes. DNR staff strongly encourage consultants, well drillers and prospective purchasers to check BRRTS on the Web (BOTW) and the GIS Registry before drilling a well to determine the need for a set-back distance from a waste site, or for special casing or construction features. You can access BOTW and the GIS Registry at www.dnr.state.wi.us/org/aw/rr/brrts/index.

DNR RR program databases may not be comprehensive. These lists only show what contaminated sites and spills the DNR has information about. All spills or discharges of hazardous substances are to be reported by law to the DNR. Spill or any type of release of a contaminant into the environment may be reported to the DNR by calling the DNR’s 24-hour Spill Hotline at 1-800-943-0003.

BRRTS on the Web (BOTW) – The DNR’s Bureau for Remediation and Redevelopment’s Tracking System (BRRTS) is the RR Program’s main database for tracking contaminated properties and this database is accessible via the Internet (www.dnr.state.wi.us/org/aw/rr/brrts/index.htm). New sites are added as they are reported to DNR. Information available on BRRTS On The Web includes:

- A list of thousands of contaminated sites, including spill sites, Superfund sites, etc.;
- Clean underground storage tank removals;
- Search capabilities that allow you to find these sites using several different key words, including the county, city or specific location of the site;
- A list of investigation and remediation activities conducted at each site;
- Names of companies/businesses connected to the site; and
- Names of DNR project managers responsible for each site.

GIS Registry of Closed Remediation Sites – Sites listed on the Geographic Information System (GIS) Registry of Closed Remediation Sites are those that have groundwater contamination remaining above levels listed in ch. NR 140, Wis. Administrative Codes. This list generally includes sites using natural attenuation as a DNR-approved remedy (natural attenuation makes use of natural processes in soil and groundwater to contain the spread of contamination and to reduce the amount of contamination). In 2002 the GIS Registry was expanded to include sites with soil contamination remaining above levels listed in ch. NR 720, Wis. Admin Code. (gomapout.dnr.state.wi.us/org/at/et/geo/gwur/index.htm)

Information available on the GIS Registry includes:

- List of closed sites with groundwater contamination remaining above ch. NR 140, Wis. Adm. Code, enforcement standards;
- List of closed sites since August, 2002 with soil contamination remaining above levels listed in ch. NR 720, Wis. Admin Code;
- Closed sites with institutional controls;
- Geographic search function that allows the user to zero in on sites at the click of a button;
If the user is unsure of the exact location of a site, the GIS Registry provides multiple search options that allow the user to search for sites by county, city or village name;

⇒ Site specific information, including site maps and groundwater contaminant maps;

⇒ A link to BRRTS data providing information on site activities and submittals, along with the dates of those activities; and

⇒ GIS data at your fingertips, including important topography as well as key rivers, railroads and roads/highways.

All sites listed on the GIS Registry are also located on BRRTS on the Web. The GIS Registry includes groundwater plumes for closed sites, but not open sites. However, open sites are listed on BOTW.

SHWIMS – The Solid and Hazardous Waste Information Management System (SHWIMS) is the system used by the Waste Management program to track most facility and site data for both solid and hazardous waste entities. The purpose of SHWIMS is to store this data, provide easy access to it by DNR staff, and provide information to federal and state agencies and the general public as needed. SHWIMS data are stored in Oracle tables and is accessed through a client server application that is installed and operates on an individual’s PC.

SHWIMS is designed to track facility and site data. A site is a place that the DNR has an interest in tracking because an environmentally related event has occurred there. This includes sites with ongoing activities as well as sites where an activity or incident occurred in the past such as operations that are regulated, monitored or licensed by the Department by the solid and hazardous waste program. Areas of detail that may be applicable to a site and are tracked in SHWIMS include information on: waste program activities, contact persons, ownership, wastes handled, license records (current and historical), landfill tonnage figures, hazardous waste manifests and annual reporting, and infectious waste annual reporting.

Currently there are 77,000 sites in our SHWIMS database, which includes solid and hazardous waste facilities that are active or inactive, sites where discharges have occurred, and sites where other types of remediation and cleanup activities are or were involved. Multiple activities at any one site can be tracked in the SHWIMS database.

Contact: Aggie Cook - Agnes.Cook@dnr.state.wi.us 608/266-2414

The DNR RR program also maintains a list of Superfund Sites In Wisconsin (www.dnr.state.wi.us/org/aw/rr/archives/pubs/RR005.pdf). Since the 1980s, the DNR has been a partner with the U.S. Environmental Protection Agency (EPA) in managing the investigation and cleanup of sites on the Superfund National Priority List (NPL). Currently there are 39 sites on the NPL in Wisconsin.

Another site list is the Registry of Waste Disposal Sites in Wisconsin (www.dnr.state.wi.us/org/aw/rr/archives/pubs/RR108.pdf) first created in the early 1980s to identify abandoned landfills. Over the years, this abandoned landfill list was expanded, modified or re-named several times. The current database, last updated in 1999, is a broad catalog of sites that had some record of solid waste activity (e.g. active and inactive landfills, demolition sites, old burn pits) and is widely used by well drillers and consultants when drilling wells or doing property assessments.

Guidance on the NR 700 rule series is available at http://www.dnr.state.wi.us/org/aw/rr/technical/index.htm
Any additional compound specific and site specific agreements will include the following:

1. **Pesticide name**
2. **Narrative discussion** including the pesticide’s common name and applicable brand names, a brief history (e.g., years of use, when cancelled, etc.) and information on use (e.g., pesticide characteristics, breakdown conditions, etc.) and crops to which the pesticide was applied.
3. **General pre-cancellation label conditions** on the pesticide including information on application rates, crop usage, and environmental restrictions.
4. **Cancellation notes** on the pesticide including why the pesticide was cancelled and a list of provisions allowing for use of existing stocks.
5. **Criteria under which DATCP may grant landspreading authorization** without site-specific DNR review. This section should discuss how the landspreading activity would follow DATCP’s guidance as well as identify applicable compound specific criteria.
6. **Waste Management Requirements.** Contaminated media that exhibits a hazardous waste characteristic or contains a listed hazardous waste constituent that is neither a fertilizer nor currently registered pesticide in a concentration that exceeds an RCL under the contained out policy may not be landspread. In this circumstance, excavated or extracted contaminated media are hazardous wastes. The agreement shall address applicable waste management practices and identify any characteristic or listed hazardous waste constituent in the contaminated media that may provide a basis for the material being a hazardous waste. The applicability of DNR’s contained out policy should be mentioned in this discussion.
7. **Sign off** by agency administrators or designated bureau directors.
8. **Attachments** including a copy of the pesticide cancellation agreement as published in the Federal Register and an example of a recent label if available.
29

ATTACHMENT C.2
DATCP and DNR Compound Specific Agreement
on Landspreading Pesticide Contaminated Soil for:
Cyanazine

Note this agreement only applies to the application of soil contaminated with Cyanazine. It does not apply to any other compound or to the use of product cyanazine.

1. Pesticide name, – Cyanazine

2. Narrative discussion. Cyanazine (Bladex, Extrazine and other brand names) was a selective herbicide registered by US EPA in 1971 and used primarily on corn in Wisconsin. Throughout the 1980s and into the 1990s, cyanazine was one of the four most used herbicides in Wisconsin. Moving through the 1990s, its market share diminished in favor of other products. Cyanazine undergoes microbial breakdown in use conditions, with a published field half-life of 2 weeks. As with other herbicides, its breakdown is much slower at mixing/loading sites. Two of its metabolites are shared with atrazine and have been found in groundwater (although they cannot be traced back to cyanazine use since atrazine has typically also been used and atrazine parent may also be present in groundwater). While typically not a primary chemical remaining in soils at agrichemical facilities, cyanazine is still commonly found.

3. Pre-Cancellation Label Conditions:
(a) Application rates: Generally 1-4#/acre prior to 1998, depending upon soil organic matter. Rates were reduced to 1#/acre from 1999 through 2002, its last year of use.
(b) Wisconsin crops: Field corn, popcorn, seed corn and sweet corn.
(c) Environmental Restrictions: Some uses were not permitted on sand or sandy loam or soils with <1% organic matter.

4. Cancellation Notes: A voluntary cancellation agreement was reached in 1996, following a data call-in requesting additional cancer risk studies (61 FR 39023 July 25, 1996, FRL-5385-7). Technical grade production ended in 1997 and the last formulated products were produced in August 1998. Distribution and use of existing stocks were allowed through December 2002.

5. General criteria under which DATCP may grant landspreading authorization without site-specific DNR review. Application of soil contaminated with cyanazine must follow ATCP 35.03 and DATCP’s landspreading guidance in Landspreading Instructions, including completion of:
(a) DATCP form ARM.ACP198 (rev.11/00), Landspreading Agreement Form, a form that must be signed by the landowner which provides specific information on the landspreading site, the product credit, and the landowner.
(b) DATCP Form ARM.ACM.268 (11/00), Land Use Agreement form, a form for paying landowners for tillage and the use of their fields which provides information on tillage and costs, land access fees, landowner agreement, and the responsible person.
(c) DATCP form ARM.ACP 199 (rev.1/02), Landspreading Post-Application Report, that is completed after landspreading which provides general information on the application of the soil or water, landspreading site information, and the landspreading permit holder.
(d) Prior to the issuance of the written landspreading agreement, DATCP staff will conduct an onsite field inspection to:
1. Verify site information on the landspreading agreement form such as soil type,
2. Review site for topographic features such as sink holes, ground slope, etc.,
3. Evidence of high groundwater, wetlands and adjacent surface waters
4. Ability for the site to meet set back requirements
6. **Specific criteria under which DATCP may grant landspreading authorization without site-specific DNR review.** [Proposals that cannot meet these conditions will require written site-specific DATCP & DNR concurrence]: In addition to the general criteria outlined in section 5., above, the following compound specific criteria must also be met and must be incorporated into DATCP’s written landspreading approval.
   (a) Maximum application rate shall not exceed 0.5 #/acre active ingredient (12.5% of the maximum label rate and 50% of the cancellation use rate)
   (b) Applications of cyanazine within an atrazine prohibition area shall not exceed 0.1 #/acre
   (c) No application on sand, sandy loam or soils with <1% organic matter
   (d) Applications limited to non-crop (e.g., Pastures and uncropped fields) and corn sites
   (e) Plus the following landspreading requirements:
      1. Surface water setback - Minimum distance is 100 ft. for running water and 200 ft for lakes and ponds
      2. Well setback – Minimum distance is 100 ft.
      3. Landspreading must be by DATCP certified applicator
      4. Landspreading may not take place on frozen soils
      5. The applicator will provide advanced notice to DATCP prior to landspreading event
      6. Upon completion, landspread material must be incorporated into the soil

7. **Waste Management Requirements.** –Cyanazine is not listed as a hazardous waste or as a hazardous constituent in the NR 600, Wis. Adm. Code, rule series. Therefore, unless the material exhibits a hazardous characteristic, soil contaminated with cyanazine may be managed as a solid waste.

8. **Sign off.**

   For DATCP
   Kathy F. Pfelsticker, Administrator
   Agricultural Resource Management Division

   Date: 3-8-05

   For DNR
   Allen K. Shea, Administrator
   Air and Waste Management Division

   Date: 3/16/05

9. **Attachments**
   (a) “Bladex 4L” Label
Summarized Supplemental Labels

The following is a list of summarized information contained in the supplemental labels for this product. It is for your convenience and should be consulted in addition to the product label when you use this product. The correct and complete version of the label is on the product itself.

**Bladex® 4L**

**herbicide**

**FOR USE ON FIELD CORN, POPCORN, SWEET CORN, FIELD CORN GROWN FOR SEED, AND COTTON**

**RESTRICTED USE PESTICIDE**

This product is a restricted use pesticide (RUP) due to reproductive and root damage and surface water concerns. Users must read and follow all precautionary statements and instructions on the product label. If you do not read and follow these instructions, you may not be adequately protected. Use only as directed by the label. Do not use this product in a manner inconsistent with its labeling. Do not apply a product in a manner that results in injury to persons or damage to property. Do not use a product in a manner that results in injury to non-target species or damage to natural resources.

**STORAGE**

Store in a cool, dry, well-ventilated area.

**IN CASE OF ACCIDENT OR POISONING**

If you are injured, call a physician or poison control center. Drink 1 to 2 glasses of water and induce vomiting by: touching back of throat with tongue. Do not induce vomiting of anything by mouth to unconscious persons.

**STORAGE OF RESIDUES**

Clean thoroughly after use. Wash and dry all utensils used.

**IN CASE OF ACCIDENT**

Seek immediate medical attention.

**IN CASE OF OVEREXPOSURE**

If you are exposed or think you may be exposed, see a physician immediately. Wash and dry all contaminated clothing and equipment.

**IN CASE OF FIRE**

Use water雾extinguisher for small fires. Do not use water雾extinguisher for large fires.

**IN CASE OF CONTAMINATION**

Wear protective clothing and equipment. Do not allow children to come into contact with this product.

**IN CASE OF CONTACT WITH EYES**

Wash eyes with plenty of water. Get medical attention immediately.

**IN CASE OF CONTACT WITH SKIN**

Wash skin with soap and water.

**IN CASE OF INHALATION**

Remove victim to fresh air. If not breathing, give artificial respiration. Do not give by mouth to unconscious persons.

**IN CASE OF EXPOSURE**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF INGESTION**

Do not induce vomiting. Do not give by mouth to unconscious persons.

**IN CASE OF CONTACT WITH CLOTHING**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF CONTACT WITH WATER**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO WATER**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO AIR**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO FIRE**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO LIGHT**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO SOUND**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO VIBRATION**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO RADIATION**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO ELECTRICITY**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO MAGNETISM**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO MOISTURE**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO DUST**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO FOG**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO FUMES**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO VAPORS**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO SMOKE**

Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO NOISE**

Wash and dry all contaminated clothing and equipment.

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Wash and dry all contaminated clothing and equipment.

**IN CASE OF EXPOSURE TO RADIATION**

Wash and dry all contaminated clothing and equipment.
SEED

Apply BLADEX treatments just before, at, or after planting, but before the crop emerges. Do not remove treated seed from the seedlots prior to or during planting.

If BLADEX is applied early, more than 15 days before planting, a split application of the recommended dosage is required. If pre-planting weed control is desired, for split applications, do not exceed the total amount of BLADEX for the soil texture and organic matter section of Table 1.

If BLADEX is applied early, more than 15 days before planting, a split application of the recommended dosage is required. If pre-planting weed control is desired, for split applications, do not exceed the total amount of BLADEX for the soil texture and organic matter section of Table 1.

To retain browsing, recommended preemergence applications or preplanting with appropriate herbicides can be used to reduce the number of weeds.

Always consult the label for specific instructions.

For more information, contact your local Cooperative Extension Service.

Use Rates for BLADEX Applied Alone

- Use Table 1 for field corn, popcorn, and field grain grown for seed.
- Use Table 2 for BLADEX incorporated with other herbicides.
- Use Table 3 for BLADEX tank mix rates with Arizon, Larz, 4EC, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX in Combination with Other Herbicides

- Use Table 4 for BLADEX tank mix rates with Arizon, Larz, 4EC, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX and Other Herbicides

- Use Table 5 for BLADEX tank mix rates with Arizon, Larz, 4EC, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX on Sweet Corn

- Use Table 6 for BLADEX tank mix rates with Larz, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX on Weed Control

- Use Table 7 for BLADEX tank mix rates with Larz, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX on Weed Control

- Use Table 8 for BLADEX tank mix rates with Larz, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX on Weed Control

- Use Table 9 for BLADEX tank mix rates with Larz, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX on Weed Control

- Use Table 10 for BLADEX tank mix rates with Larz, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.

Use Rates for BLADEX on Weed Control

- Use Table 11 for BLADEX tank mix rates with Larz, Dual 8R, Paragon, Surplus, Harmon Plus, Surfact-1, and Endicane 6.75 EC herbicides. Refer to the manufacturers' labels for proper use rates, rotating guidelines, and all other precautions. Follow the label with the greatest restrictions.
# USE RATES
- Use Table 1 for field corn, popcorn, or field corn grown for seed with surface residue ≤ 20%.
- Use Table 2 for field corn, popcorn, or field corn grown for seed, with residue > 20%.
- Use Table 3 for field corn, popcorn, or field corn grown for seed in Kentucky, Tennessee, and Kansas East of Highway 99.

## Annual Grass and Broadleaf Weeds Up to 3" Long
- Use BLADEX alone and add 1-3 fl oz per acre of crop oil concentrate (COC) if weeds are emerging at the time of application.
- For best herbicidal results use a minimum of 20 gal per acre of liquid fertilizer as the carrier and replace COC with a nontoxic surfactant.

## Broadleaf Weeds Exceeding 3"
- If broadleaf weeds exceed 3" in foliage, add 2.4-D LV Ester and/or "Banvel" and non-ionic surfactant at recommended rates.
- Additional weeds controlled with 2.4-D LV may be: broadleaf, chamomile, cocklebur, giant ragweed, musk thistle, parthenium, primrose, tickleweed, and tansy mustard.
- To control existing althaea, add 0.3 to 0.5 pt per acre of "Banvel" to the spray mixture of BLADEX plus 2.4-D LV. Apply the althaea 6 to 8 in. before althaea excess 6 in. in height.

## Grass Weeds Exceeding 3"
- If grass weeds exceed 3" in foliage, add either Granoxo Extra or Rainbird at the rate of the recommended rates for these products.
- Add 1 to 2 pts of a non-ionic surfactant per 100 gal of spray.
- "Granoxo Extra," well established weeds over 6" in. tall, will not be well controlled.
- Do not apply "Granoxo Extra" in a suspension type liquid fertilizer containing clay.

## Burn Down Under Dry Conditions for Control of Soil Grasses
- For burndown of existing soil grasses such as orchardgrass, bromegrass, ryegrass, or fescue, when conditions are very dry, add "Granoxo Extra" to the tank mix at the recommended rates.

## Perennial Grass Weeds
- For the control of perennial grasses such as johnsongrass or quackgrass, add "Roundup" at the recommended rate or follow with a postemergence application of Dacty's ACCENT.

## Other Labeled Tank Mixes
- BLADEX can be tank mixed with other labeled products according to the directions for the individual treatments as explained in the Conventional Tillage section of this label.
- Early preplant applications of BLADEX may be tank mixed with 2 pts per acre of Preplex 4L, or 11 lb of Rinsaver Calibra 12LV. Apply 20 days or more prior to planting.

## Sequential Treatments
- If due to weather conditions, corn is planted more than 30 days after application, a sequential herbicide treatment may be necessary to provide additional control of weed growth.
- This may be a postemergence treatment with ACCENT, BLADEX 90DF, EXTRANTEX II, or some other herbicide treatment applied at or after planting.

## USE RATE TABLES FOR CORN

### TABLE 1. FOR FIELD CORN, POPCORN, SWEET CORN, AND FIELD CORN GROWN FOR SEED
- Early Preplant or Preemergence Broadcast Rates in Conventional Tillage with ≤ 30% Surface Residue

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0% OM</th>
<th>1% OM</th>
<th>2% OM</th>
<th>3% OM</th>
<th>4% OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy loam</td>
<td></td>
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<tr>
<td>Sandy silt</td>
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<tr>
<td>Clay loam</td>
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<tr>
<td>Clay</td>
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</tbody>
</table>

### TABLE 2. FOR FIELD CORN, POPCORN, SWEET CORN, AND FIELD CORN GROWN FOR SEED
- Early Preplant or Preemergence Broadcast Rates in Conservation or No-Till Tillage with < 30% Surface Residue

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0% OM</th>
<th>1% OM</th>
<th>2% OM</th>
<th>3% OM</th>
<th>4% OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy loam</td>
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<td>Sandy silt</td>
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<tr>
<td>Clay loam</td>
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</tr>
<tr>
<td>Clay</td>
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</tr>
</tbody>
</table>

### TABLE 3. FOR FIELD CORN, POPCORN, AND FIELD CORN GROWN FOR SEED
- Early Preplant or Preemergence Broadcast Rates for Use in All States Except Kentucky, Tennessee, and Kansas East of Highway 99

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0% OM</th>
<th>1% OM</th>
<th>2% OM</th>
<th>3% OM</th>
<th>4% OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandy silt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## USE RATE TABLES FOR CORN

### BLADEX 4L ALONE, PREEMERGENCE

### TABLE 4. FOR FIELD CORN, POPCORN, AND FIELD CORN GROWN FOR SEED
- Early Preplant or Preemergence Broadcast Rates: For Use Only in All Kentucky, Tennessee, and Kansas East of Highway 99

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0% OM</th>
<th>1% OM</th>
<th>2% OM</th>
<th>3% OM</th>
<th>4% OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandy silt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 5. FOR FIELD CORN, POPCORN, AND FIELD CORN GROWN FOR SEED

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0% OM</th>
<th>1% OM</th>
<th>2% OM</th>
<th>3% OM</th>
<th>4% OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandy silt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## BLADEX 4L PLUS ATRAZINE 4L, PREEMERGENCE

### TABLE 6. FOR FIELD CORN, POPCORN, AND FIELD CORN GROWN FOR SEED

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0% OM</th>
<th>1% OM</th>
<th>2% OM</th>
<th>3% OM</th>
<th>4% OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandy silt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay loam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IMPORTANT: maximum rate limits per acre per year vary by year of application. See Cyanazine Rate Limits section of this label. If rate is lower than stated in this section but has a particular soil type and organic matter content, the maximum rate for that year can be applied. With weed control may be inadequate. This product may not be used after Dec. 31, 2012.**

**If 90% Atrazine is used, multiply the Atrazine rates shown in this table by 1.11 to equal the appropriate postemergence application for 90% Atrazine in this product. Atrazine 80DF is used, multiply the Atrazine rates shown in this table by 1.25 to equal the appropriate postemergence application of Atrazine 80DF.**

---

**Do not use in the high sandy soils of the Atlantic Coastal Plain.**

Do not use BLADEX 90DF in tankmix with "Eradicade 6/7L" and/or "Surpass" on field corn grown for seed.
**TABLE 7. FOR SWEET CORN**

<table>
<thead>
<tr>
<th>Soil Texture % OM</th>
<th>BLADEX-4L (quarts/acre)</th>
<th>ATRAZINE-4L (quarts/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1%</td>
<td>0.6 - 1.2</td>
<td>1.2 - 2.4</td>
</tr>
<tr>
<td>1% - 3%</td>
<td>1.4 - 2.4</td>
<td>2.6 - 4.0</td>
</tr>
<tr>
<td>3% - 5%</td>
<td>2.0 - 3.6</td>
<td>3.2 - 5.4</td>
</tr>
</tbody>
</table>

**TABLE 8. FOR SWEET CORN**

Early Preplant or Preemergence Broadcast Rates in Tankmix Combinations with Lasso®, Sultah®, Eradicane 6.7E®, or Dual® EC

<table>
<thead>
<tr>
<th>Soil Texture % OM</th>
<th>BLADEX-4L (quarts/acre)</th>
<th>ATRAZINE-4L (quarts/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1%</td>
<td>0.6 - 1.2</td>
<td>1.2 - 2.4</td>
</tr>
<tr>
<td>1% - 3%</td>
<td>1.4 - 2.4</td>
<td>2.6 - 4.0</td>
</tr>
<tr>
<td>3% - 5%</td>
<td>2.0 - 3.6</td>
<td>3.2 - 5.4</td>
</tr>
</tbody>
</table>

**TABLE 9. FOR SWEET CORN**

Early Preplant or Preemergence Broadcast Rates in Tankmix Combinations with Atrazine 4L and Lasso®, Sultah®, Eradicane 6.7E®, or Dual® EC

<table>
<thead>
<tr>
<th>Soil Texture % OM</th>
<th>BLADEX-4L (quarts/acre)</th>
<th>ATRAZINE-4L (quarts/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1%</td>
<td>0.6 - 1.2</td>
<td>1.2 - 2.4</td>
</tr>
<tr>
<td>1% - 3%</td>
<td>1.4 - 2.4</td>
<td>2.6 - 4.0</td>
</tr>
<tr>
<td>3% - 5%</td>
<td>2.0 - 3.6</td>
<td>3.2 - 5.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>6.7%</th>
<th>8.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% - 3%</td>
<td>2.6 - 5.0</td>
<td>4.0 - 6.4</td>
</tr>
<tr>
<td>3% - 5%</td>
<td>3.2 - 5.4</td>
<td>4.8 - 7.2</td>
</tr>
</tbody>
</table>

**MIXTURE USES IN COTTON**

**FOR USE ONLY IN ARIZONA**

BLADEX mix tank mixture with Promout® or Promut® herbicides may be applied late or in spring when cotton is ready to plant. For late applications, apply the recommended amount of Promout® or Promut® herbicides to the cotton planting solution prior to planting. For spring applications, apply the recommended amount of Promout® or Promut® herbicides to the cotton planting solution prior to planting. For spring applications, apply at least 20 gal of water per acre to ensure proper coverage. Do not apply to cotton plants. Cotton plants that are not treated with Promout® or Promut® herbicides may be susceptible to damage from BLADEX mix tank mix applications. Do not apply BLADEX mix tank mix to cotton plants that are not treated with Promout® or Promut® herbicides.

**FOR USE IN CALIFORNIA**

BLADEX mix tank mix applications are recommended for use on cotton before planting. Apply the recommended amount of Promout® or Promut® herbicides to the cotton planting solution prior to planting. For late applications, apply the recommended amount of Promout® or Promut® herbicides to the cotton planting solution prior to planting. For spring applications, apply at least 20 gal of water per acre to ensure proper coverage. Do not apply to cotton plants. Cotton plants that are not treated with Promout® or Promut® herbicides may be susceptible to damage from BLADEX mix tank mix applications.
BROADLEAVES

Annual herb (purpletop)
Black nightshade
Childhood
Cutleaf coneflower
Landscape

Garden soil
Maize
Shepherd’s-purse
Wild mustard
Wild radish

PREEMERGENCE USES IN COTTON
FOR USE IN ALABAMA, ARKANSAS, GEORGIA, LOUISIANA, MISSISSIPPI, MISSOURI, AND TENNESSEE

BLADE 4L ALONE

Use BLADE 4L for early season weed control in cotton. Supplemental practices (such as BLADE applied directed postemergence) may be necessary to control later season weeds.

Carefully match the BLADE rate (Table 13) with the soil texture. Do not use BLADE on fields where the soil texture changes from coarse to fine. Avoid overlapping the spray pattern or overlapping the field with BLADE. Application rates above those recommended for the soil texture can result in yellowing or burning of the cotton.

While cotton exhibits tolerance to BLADE, adverse growing conditions such as excessive winds, standing water, or cool weather may result in yield reduction.

BLADE PLUS ZORIAL RAPID 80

BLADE may be used in a tank mix combination with Zoral Rapid 80 at cotton. Apply BLADE plus Zoral Rapid 80 at the proper rate for the soil texture shown in Table 13. The soil must contain at least 1.0% organic matter. Soil placement should be 1/8 to 1/4" from the soil surface. Plant only cotton within six months after the last application of Zoral Rapid 80; other crops may be injured by residual herbicide in the soil.

Weeds Controlled

Annual morning glory
Black nightshade
Childhood
Cutleaf coneflower
Landscape

DIRECET POSTEMERGENCE AND LAZY USES IN COTTON
FOR USE IN ALL COTTON-GROWING STATES

BLADE may be applied alone and in tank mix combinations as a directed postemergence or lazy treatment to cotton. These applications may be either a postemergence or lazy treatment to weeds in all cotton growing states.

Apply BLADE before weeds are more than 2" tall. For a directed postemergence treatment, apply BLADE after the cotton is at least 6" tall. For a lazy treatment, apply BLADE after the cotton is at least 12" tall.

Direct the spray mixture toward the soil, around the base of the cotton plant, and contact of the spray mixture with the cotton leaves will injure the foliage. The use of leaf wetters or other agent is recommended for avoiding the cotton foliage.

When applied as a lazy treatment before weeds emerge, the effectiveness of BLADE depends on rainfall or irrigation to move the herbicide into the soil. The degree of preemergence control from a lazy treatment will be reduced if soil moisture and temperature conditions cause deep penetration of toil nearby. When irrigation water is used to activate the herbicide, every row must be watered, and all treated soil must be irrigated.

BLADE Applied Alone

For a directed postemergence treatment, apply BLADE at the rate shown in Table 14. For a lazy treatment, apply BLADE at the rates shown in Table 15. Add a nonionic surfactant for use on growing cotton at the rate of 2.6% per 100 gal of spray mixture (or as directed by the manufacturer).

BLADE Plus MSMA

Apply a tank mix combination of BLADE plus MSMA and a surfactant after the cotton is at least 6" tall, but before it reaches the bloom stage. Apply no more than two applications of this mixture before the first bloom stage. Tank mix BLADE plus MSMA at the rates indicated in Table 16. Add a nonionic surfactant at the rate of 2.6% per 100 gal of spray mixture (or as directed by the manufacturer).

Weeds Controlled

Annual morning glory
Black nightshade
Cocklebur
Crotalaria
Erosion
Lambquarters
Nightshade (annual)

PRECAUTIONS FOR COTTON

- Failure to wait the recommended time interval between application and planting may result in crop injury.
- At least 1" of rainfall or equivalent irrigation that waters the surface of the soil after application must precede planting.
- The use of this treatment on calcareous or calcic soil complicates may result in crop injury.
- Do not use on coarse soil or in irrigation water.
- Do not apply within 54 days of harvest.

USE RATE TABLES FOR COTTON

BLADE 4L ALONE, IDLE SEASON OR EARLY PREPLANT—CALIFORNIA ONLY

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>30 Days</th>
<th>60 Days</th>
<th>90 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 2%</td>
<td>Over 2%</td>
<td>Under 2%</td>
</tr>
<tr>
<td>Sandy, Loamy</td>
<td>1.5</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>All Other</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
</tr>
</tbody>
</table>

*For the time intervals between those listed in this table, adjust the rates proportionally.

IMPORTANT: maximum time limits per acre per year vary by year of application. See Cytometry Rate Limits section of this label. If rate cap is below that recommended for the cotton variety, use the cap for the year the cotton can be applied but avoid overuse. This product may not be used after Dec. 31, 2002.

**The soil must contain at least 1% organic matter.

Do not use on coarse soils (sands and loamy sands).

BLADE 4L PLUS PROWl OR TRIFLURALIN, PREPLANT—ARIZONA ONLY

TABLE 11, FOR COTTON

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy, Loamy</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Silty clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

BLADE 4L PLUS ZORIAL RAPID 80, PREEMERGENCE

TABLE 12, FOR COTTON

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy, Loamy</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

BLADE 4L ALONE AND PLUS "ZORIAL RAPID 80", PREEMERGENCE

TABLE 13, FOR COTTON

For use in Alabama, Arkansas, Georgia, Louisiana, Missouri, and Tennessee.

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy, Loamy</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*For the time intervals between those listed in this table, adjust rates proportionally.

IMPORTANT: maximum time limits per acre per year vary by year of application. See Cytometry Rate Limits section of this label. If rate cap is below that recommended for the cotton variety, use the cap for the year the cotton can be applied but avoid overuse. This product may not be used after Dec. 31, 2002.

**The soil must contain at least 1% organic matter.

Do not use on coarse soils (sands and loamy sands).

BLADE 4L, ALONE, DIRECTED POSTEMERGENCE AND LAZY

TABLE 14, FOR COTTON

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy, Loamy</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Sandy clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Clay</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Height of Cotton</th>
<th>Broadleaf</th>
<th>12&quot; Band</th>
<th>19&quot; Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'-9'</td>
<td>0.25 quai</td>
<td>0.32 quai</td>
<td>0.5 quai</td>
</tr>
<tr>
<td>9'</td>
<td>0.35 quai</td>
<td>0.55 quai</td>
<td>0.9 quai</td>
</tr>
</tbody>
</table>

Use the maximum rate when dry and conditions exist.
### TABLE 15. FOR COTTON

<table>
<thead>
<tr>
<th>Height of Cotton</th>
<th>Soil Textures</th>
<th>BLEADEX-4L (quarts/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot; or more</td>
<td>Sandy loam, Silty loam, Clay loam, Sandy clay, Clay loam, Clay</td>
<td>0.6-1.4 q/a, 0.6-1.0 q/a</td>
</tr>
<tr>
<td>10&quot; or less</td>
<td></td>
<td>0.2-0.4 q/a</td>
</tr>
</tbody>
</table>

**BALED DE 4L PLUS MSMA, DIRECTED POSTEMERGENCE**

<table>
<thead>
<tr>
<th>Product (quarts/acre)</th>
<th>Treated 15&quot; Row</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLEADEX-4L-MSMA (4 g/ha)</td>
<td>0.6-1.0 q/a, 0.6-0.8 q/a</td>
</tr>
<tr>
<td>BLEADEX-4L (4 g/ha)</td>
<td>0.6-0.8 q/a</td>
</tr>
<tr>
<td>MSMA (4 g/ha)</td>
<td>0.6-0.8 q/a</td>
</tr>
</tbody>
</table>

**WEATHER EFFECTS AND MODE OF ACTION**

As a pre-emergence herbicide, BLEADEX is active primarily through the root. Its effect on weeds is dependent on adequate rainfall to move the herbicide into the root zone. The soil must be thoroughly dry during the period when weed seeds germinate. The soil should be thoroughly dry during this period.

**APPLICATION INFORMATION**

This product may not be mixed/ground or used within 50 ft. of all wells including abandoned wells, drainages wells and sink holes.

**Application Equipment**

**Nozzles**

Use nozzles that provide adequate coverage. Ensure that the nozzles are the same size and spaced uniformly. Calibrate the sprayer before use and check it frequently during use.

**Pump**

Use a pump with capacity to:
- Maintain 35 to 45 gpm at the nozzles.
- Provide sufficient agitation in tanks to keep mixture in suspension.
- Provide a minimum of 200 sprays per hour at all times.
- Provide sufficient air to dry properly and prevent product loss. The pump should circulate at least 10 gal per min for every 100 gal in the tank through the jets of a correctly positioned sparger or jet sprayer.

**Nozzle Screens**

To prevent the nozzles from clogging, place 10- to 16-inch nozzle screens on the suction side of the pump. Do not place a screen in the recirculation line. Use a 40- to 60-inch screen between the pump and boom. Check your equipment manufacturer's literature for specific recommendations.

**General Mixing and Spraying Directions**

Always use BLEADEX with liquid fertilizer carriers or other formulations. A simple but very reliable TMC evaluation procedure is explained in the Tank Mix Compatibility Evaluation Procedure section of these instructions.

**Tank Mix Compatibility**

1. Add 1 pint of liquid carrier to each 2-qt. jar. Mark the first jar with “BLEADEX” and the second jar with “water.”
2. Add 6 oz. of a suitable convertible (e.g., bleached or unbleached) paper to the jar marked “water,” and place the jar under compressed air for 5 to 10 seconds. Add 6 oz. of 1 part per gallon of carrier to the jar marked “BLEADEX.”
3. Add the appropriate amount of herbicide to each jar, mix each jar, and shake them for 5 to 10 seconds.

**Note:** If problems are encountered in mixing variable density or film-forming formulations into liquid fertilizer, it may be necessary to add the herbicide to the tank first.

**Tank Test for BLEADEX Compatibility**

**Procedure**

1. Let each jar stand on one-half hour. If the mixture separates, agglomerates, or precipitates, shake the jar again for 10 to 15 seconds, and note whether any of the following occurs:
   a. Separated phases do not remix uniformly.
   b. Lumps do not disperse.
   c. Precipitate does not disperse readily.
   d. Precipitate sticks tenaciously to the glass.
2. If the mixture does not exhibit any of these problems in cold jar, the herbicide can be safely used in that carrier without checking for compatibility with other carriers.
3. If problem 1 or 2 occurs in the cold jar, and the hot jar marked “water” but not does not occur in the hot jar marked “BLEADEX,” the compatibility agent should be used.
4. If problem 1, 2, or 3 occurs in both jars, the herbicide and carrier are incompatible and should not be used in the same spray tank. Alternatively, a different tank mix compatibility agent can be evaluated.
5. If problem 1, 2, or 3 is noted in both jars, and the hot jar marked “water” but not does not occur in the hot jar marked “BLEADEX,” the compatibility agent should be used. Complete manual agitation can be maintained and immediate clean-out of the stirrer is in the system is required.
6. If problem 1, 2, or 3 is noted in the hot jar marked “BLEADEX,” the use procedure and all equipment at the other side of the tank should be assumed to be the most effective in the current tank.
7. When the compound of a mixture is determined to be compatible by this test, the tank should be mixed in accordance with these instructions. Do not exceed 1.2 g/ha of the herbicide or the carrier involved.
8. The following compatibility agent, noted by the various tank mix combinations, is used to improve compatibility in liquid. 
FERTILIZER IMPREGNATION, APPLICATION, AND STORAGE

BLADEX may be used to coat or impregnate dry granular fertilizer for early prilled, corresponding to a temperature of 180°F or 70°C. All recommendations, limitations, and special precautions on this label must be followed, in addition to any site-specific regulations for blending, impregnating, and applying dry bulk fertilizer.

**General Blending Directions**

Dry bulk fertilizers may be coated or impregnated with BLADEX using lower blendings. A 2-hour mixing period followed by a 2-hour blending period is recommended. Blend the fertilizer to the desired temperature of 180°F or 70°C. All regulations, limitations, and special precautions on this label must be followed, in addition to any site-specific regulations for blending, impregnating, and applying dry bulk fertilizer.

**Impregnating Fertilizer with BLADEX Alone**

1. Add BLADEX at 4L for each 100 lbs. of fertilizer to be treated. A minimum of 200 lbs. of fertilizer must be treated for every 100 lbs. of fertilizer.
2. Mix the fertilizer and BLADEX thoroughly using a mixer or a paddle mixer. The mixture must be thoroughly mixed in a large, suitable mixer.
3. Add water to the mixture to achieve a uniform consistency with the fertilizer in the drum or mixer tank to which the fertilizer will be applied.
4. Apply the fertilizer to the soil using a spreader or broadcast method. The application rate should be determined by the manufacturer's recommendations.

**Impregnating Fertilizer with BLADEX in Tank Mixers with Other Herbicides**

1. While the fertilizer is blending, add the BLADEX mix and the tank mix partner last.
2. Apply necessary drying agents to ensure a thorough mixing and drying process for at least 3 hours.
3. Follow the appropriate use instructions found in Section A in addition to BLADEX instructions.

**Applying Impregnated Fertilizer**

1. Fertilizer that is impregnated or coated with BLADEX must be applied uniformly. Crop injury and/or poor weed control may result if impregnated fertilizer is not uniformly applied. To ensure uniform application:
   - Calibrate the fertilizer applicator accurately.
   - Do not apply the fertilizer immediately after the rain, in wet soil, or during freezing temperatures.
   - Do not apply the fertilizer immediately after the rain, in wet soil, or during freezing temperatures.
   - Do not apply the fertilizer immediately after the rain, in wet soil, or during freezing temperatures.

**Equipment Cleaning**

Equipment used to apply or impregnate fertilizer impregnated with BLADEX alone or in combination with other herbicides must be cleaned out before it is used in another process. It is recommended to use a mixture of 1:10 (dead water to fertilizer) to clean the equipment. If the equipment is not cleaned properly, it may cause clogging or other problems.

**ROTATIONAL CROPS**

Use these guidelines to determine which rotational crops can be planted safely following the use of BLADEX. The use of BLADEX is restricted for rotation in corn or soybeans. If the field is treated with BLADEX and then planted to corn or soybeans, a minimum of 3 years must pass before planting corn or soybeans. If the field is treated with BLADEX and then planted to corn or soybeans, a minimum of 3 years must pass before planting corn or soybeans. If the field is treated with BLADEX and then planted to corn or soybeans, a minimum of 3 years must pass before planting corn or soybeans.

**SPRAY DRIFT MANAGEMENT**

The interaction of mixing equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all factors when making decisions about the application of BLADEX. The use of drift reduction strategies is necessary to apply the largest drifts that provide adequate coverage for the control of weeds, pests, and diseases. The presence of sensitive species nearby, such as the environment around a waterway, and the presence of non-target species, such as bees, may affect how an applicator applies drift control and coverage.

**CONTROLLING DROPLET SIZE**

- **Volume**: Use high volume for plants that require higher than the recommended rate, as higher than the recommended rate may increase the risk of drift. Lower than the recommended rate is recommended for crops that are more sensitive to drift, such as corn or soybeans. The use of a higher than recommended rate may increase the risk of drift. Lower than the recommended rate is recommended for crops that are more sensitive to drift, such as corn or soybeans.

**NOZZLE TYPE**: Use a nozzle that is designed for the intended application, with the appropriate nozzle type, to prevent drift and to achieve optimal coverage.
MOU Between DATCP and DNR on Discharge of Hazardous Substances

ATTACHMENT C.3
DATCP and DNR Compound Specific Agreement on Landspreading Pesticide Contaminated Soil for:

Dinoseb

Note this agreement only applies to the application of soil contaminated with Dinoseb. It does not apply to any other compound or to the use of product Dinoseb.

1. Pesticide name – Dinoseb

2. Narrative discussion. Dinoseb (Premerge, Dinitro and other brand names) was a nonselective herbicide/desiccant used since 1948 primarily by Wisconsin vegetable producers, most particularly for killing potato vines in advance of potato harvest. Rapid degradation occurs through microbial action, photodecomposition and volatilization. Potato vine killing applications were most commonly by aerial application and groundwater contamination has been found at some mixing/loading locations, although no groundwater contamination was found through monitoring in use settings.

3. Pre-Cancellation Label Conditions:
   (a) Application rates: 0.75#/acre to 12#/acre, depending upon crop and timing
   (b) Wisconsin crops: Potato, orchard, mint, small grains, soybean, corn, others
   (c) Environmental Restrictions: No label restrictions for environmental concerns existed prior to cancellation, but groundwater vulnerability was also generating concern at the time of cancellation.

4. Cancellation Notes: Dinoseb was voluntarily cancelled in 1988, following studies that demonstrated pesticide handlers (particularly women involved in technical grade production or mixing and loading application equipment) were being exposed at levels that might cause reproductive problems. There was a limited provision for use of existing stocks on cane berries in Oregon that ceased at the end of 1989. There is no provision for use of existing stock.

5. General criteria under which DATCP may grant landspreading authorization without site-specific DNR review. Application of soil contaminated with Dinoseb must follow ATCP 35.03 and DATCP’s landspreading guidance in Landspreading Instructions, including completion of:
   (a) DATCP form ARM.ACP198 (rev.11/00), Landspreading Agreement Form, which provides specific information on the landspreading site, the product credit, and the landowner.
   (b) DATCP Form ARM.ACM.268 (11/00), Land Use Agreement form, a form that must be signed by the landowner which provides information on tillage and costs, land access fees, landowner agreement, and the responsible person.
   (c) DATCP form ARM.ACP 199 (rev.1/02), Landspreading Post-Application Report, that is completed after landspreading which provides general information on the application of the soil or water, landspreading site information, and the landspreading permit holder.
   (d) Prior to the issuance of the written landspreading agreement, DATCP staff will conduct an onsite field inspection to:
      1. Verify site information on the landspreading agreement form such as soil type,
      2. Review site for topographic features such as sink holes, ground slope, etc.,
      3. Evidence of high groundwater, wetlands and adjacent surface waters
      4. Ability for the site to meet set back requirements
MOU Between DATCP and DNR on Discharge of Hazardous Substances

6. Specific criteria under which DATCP may grant landspreading authorization without site-specific DNR review. [Proposals that cannot meet these conditions will require written site-specific DATCP & DNR concurrence]: In addition to the general criteria outlined in section 5., above, the following compound specific criteria must also be met and must be incorporated into DATCP’s written landspreading approval. (a) Maximum concentration of dinoseb in excavated material is 15.6 ppm based on the direct contact RCL calculated using DNR guidance. In this case, the contaminated material is not regulated as a listed hazardous waste if landspread in compliance with this Agreement.
(b) Maximum application rate shall not exceed 0.5#/acre active ingredient (4 to 67% of pre-cancellation label rates)
(c) No application to soils with <1% organic matter
(d) Applications limited to non-crop (e.g., Pastures and uncropped fields) or crops sites with no harvest within 90 days
(e) Applications must occur during May through August (to maximize degradation rate)
(f) Plus the following landspreading requirements:
   1. Surface water setback - Minimum distance is 100 ft. for running water and 200 ft for lakes and ponds
   2. Well setback – Minimum distance is 100 ft.
   3. Landspreading must be by DATCP certified applicator
   4. Landspreading may not take place on frozen soils
   5. The applicator will provide advance notice to DATCP prior to landspreading event
   6. Breakdown of Dinoseb is more efficient under sunlight exposure. Incorporation is not mandatory.

7. Waste Management Requirements. –
Dinoseb is listed in Table IV (P020) of ch. NR 605, Wis. Adm. Code as an acute hazardous commercial chemical product. Consequently, any contaminated soil or water would be considered a hazardous waste except as allowed for under the DNR’s “contained out” provision. In that circumstance, the material shall also be evaluated to determine if it exhibits a hazardous characteristic. If the material is “contained out” and does not exhibit a hazardous characteristic, then the soil contaminated with Dinoseb may be managed as a solid waste.

8. Sign off.

For DATCP
Kathy F. Pielsticker, Administrator
Agricultural Resource Management Division

Date: 3-8-05

For DNR
Allen K. Shea, Administrator
Air and Waste Management Division

Date: 3/16/05

9. Attachments
“Uniroyal Dinoseb -5X” Label

Blank Page for page 1 of Dinoseb label
UNIROYAL DINOOSEB-5X
An oil soluble, emulsifiable Dinitro concentrate for controlling most annual weeds and grasses. Also used as a harvesting aid for potatoes and seed crops of forage, legumes and soybeans.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
DANGER
May be fatal if swallowed or absorbed through the skin. Do not get in eyes, on skin or clothing. Wear protective clothing. Avoid breathing spray mist. Do not take internally. Do not use contaminated clothing or shoes. Keep away from farm animals and pets.

ENVIRONMENTAL HAZARDS
This product is toxic to fish and wildlife. Do not apply directly to any body of water. Birds and other wildlife in treated areas may be killed. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS
Keep away from heat and open flame.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal.

STORAGE: Do not store at temperatures below 20°F. If stored for extended periods below 20°F, bring the contents of the container up to 32°F and agitate by rolling.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide spray mixture, or rinsewater is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities.
WORKER SAFETY

Avoid accidents: Follow these pesticide safety rules when handling this product. Wear chemical resistant goggles or face shield, impermeable gloves and apron while pouring and transferring the concentrated product and at other times when contact with concentrate or spray is likely. Wear long sleeved shirt and long legged pants or coveralls, and shoes and socks while mixing concentrate and while spraying. DO NOT WEAR CONTAMINATED CLOTHING OR SHOES. REMOVE CONTAMINATED CLOTHING IMMEDIATELY AND WASH THOROUGHLY BEFORE REUSE. WASH SPLASHES FROM SKIN AND EYES IMMEDIATELY. To avoid excessive amounts of spray mist, use a pesticide respirator jointly approved by the Mining Enforcement and Safety Administration (formerly the U.S. Bureau of Mines) and by the National Institute for Occupational Safety and Health.

GENERAL INFORMATION

UNIROYAL DINOSOEB 5 when used with the proper amount of oil and water, will control many of the common herbaceous weeds and grasses. Use enough spray to wet all weed growth THOROUGHLY, as it acts by contact only. The lower dosages of oil and weed killer given below will be satisfactory for control of small seeding annual grasses such as crabgrass, foxtail and barnyard (water) grass and all small seeding annual weeds such as pigweed, mustard, lambsquarters, and sorrel. Grasses growing as annual weeds may require higher dosages, particularly when mature and hard to kill. Grass control requires use of the higher amounts of oil, which creeps down the stems to the ground and prevents new growth. NOTE: Contact weed killers kill annuals, but perennials must be re-treated as new growth develops. Re-treat perennials only in non-crop areas specified below except for use on grapes, bush fruits and hops as directed below. Control will be best in warm weather.

MIXING INSTRUCTIONS

FOR OIL-WATER SPRAYS, add approximately 20% of water needed for the batch to the spray tank. In a separate container, thoroughly pre-mix the proper amount of UNIROYAL DINOSOEB 5 and oil. With vigorous agitation, add this pre-mix to the water. Add the remaining water. Agitation must be maintained during mixing and application to keep the spray uniformly mixed. FOR OIL SPRAYS, drain all water from sprayer tank, lines and pump. Add a small amount of oil to the tank, circulate through the pumps and then completely drain the system and discard the liquid. This is to remove any water remaining in the sprayer. Add desired amount of oil to the tank. With agitation, add the proper amount of UNIROYAL DINOSOEB 5. Moderate agitation will maintain a uniform spray mix. NOTE: Small amounts of water to UNIROYAL DINOSOEB 5 - oil sprays may result in extremely thick gel-like materials, which are difficult to apply. This problem can be avoided by carefully following the mixing instructions outlined.

DIRECTIONS FOR USE

GENERAL WEED CONTROL

USE ON NON-CROP AREAS SUCH AS: Airfields, Walks, Fence Lines, Roadsides, Driveways, Dry Yards, Railroads, Waste Places, and around Industrial Establishments, Pole Yards and Oil Tank Areas. Use 200 pints of UNIROYAL DINOSOEB 5 in 5 to 30 gallons of oil made up to 100 gallons with water. Spray weed growth thoroughly.

CONTACT PRE-PLANT OR PRE-EMERGENCE WEED CONTROL

UNIROYAL DINOSOEB 5 may be used to kill tiny weeds that emerge before certain crops. When practical, forming the land several days before sowing will result in more weeds being up at time of spraying. For use on land prior to planting the following large seeded crops or for use on the already planted crops: beans, soybeans, corn, cucurbits, potatoes, and gladiolus, spray at least one day before first emergence of the crop. For use on 2-4 pints of UNIROYAL DINOSOEB 5 per acre. Mix the amount with 2-5 gallons of herbicidal oil and 30 gallons of water and apply as a fine spray to insure wetting of the weeds. For season long weed control other herbicides will also be needed.
STATE SKELETONS (PREVIOUSLY TILLED FIELDS)

Preplant or preemergence control of emerged weeds in beans, soybeans, potatoes, corn, and gladiolus. UNIROYAL DINOSER-B may be used to control small annual broadleaf weeds and annual grasses that have emerged on state skeletons (previously tilled fields) prior to planting beans, soybeans, potatoes, gladiolus, or corn. For aerial application use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 10 gallons of diesel oil or herbicidal oil per acre. For ground equipment use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 10 gallons of diesel oil or herbicidal oil per acre. Apply at a minimum of 20 gallons of water per acre. After weeds have emerged, plant the crops just before or soon after spraying. Only annual weeds that are at least 3 feet tall will be killed. For season-long weed control other herbicides will be needed. NOTE: Any crop plants that are up at time of spraying may be seriously injured or killed.

SOYBEANS PLANTED IN SMALL GRAIN STubble

Preplant or preemergence control of emerged weeds in soybeans planted with minimum or no tillage in small grain stubbles in areas where planting of soybeans directly in small grain stubble with minimum or no tillage is practiced. UNIROYAL DINOSER-B can be used to burn down existing vegetation before or just after planting. For aerial application use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 10 gallons of diesel oil or herbicidal oil per acre. For ground equipment use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 10 gallons of diesel oil or herbicidal oil per acre. Apply at a minimum of 20 gallons of water per acre. Only annual weeds that are up at time of spraying will be killed. For season-long weed control other herbicides will be needed. NOTE: Any crop plants that are up at time of spraying may be seriously injured or killed.

GRAPE AND BUSH FRUITS

Apply spray containing UNIROYAL DINOSER-B when weeds are growing well but before they are pinches high. ON GRAPEVINES: Application can be made up to 3 to 4 weeks after bloom. For use in the spring before bloom or in the fall after harvest, use 2 to 4 pints of UNIROYAL DINOSER-B in 10 to 20 gallons of oil or up to 100 gallons with water. For treatment during bloom and up to 3 to 4 weeks after bloom, use no more than 2 pints of UNIROYAL DINOSER-B per 100 gallons of spray. Use up to 150 gallons per acre to give adequate spray coverage. Apply only as directed. Do not apply to the vineyard soil. Do not treat young vines with herbicides. The gall of the privet weevil is often desirable to limit spray applications. In 1 to 2 feet of soil directly under the grape trellis or where weed control problem is severe on soil may not be easily cultivated. For such infested areas, the gall of the privet weevil should be reduced proportionately. Repeat if needed, but make no more than 3 to 4 applications in a single season. NOTE: Use only on plantings 2 years old or older. Do not apply within 30 days before harvest.

ON BUSH FRUITS: Such as blackberries, currants, gooseberries, and raspberries, use 2 to 4 pints of UNIROYAL DINOSER-B in 10 to 20 gallons of oil, made up to 100 gallons with water. Apply at the rate of 125 to 150 gallons of spray per acre. In the fall after harvest or in the spring before bloom, use directed spray and do not treat young vines with herbicides. The gall of the privet weevil is often desirable to limit spray applications. In 1 to 2 feet of soil directly under the grape trellis or where weed control problem is severe on soil may not be easily cultivated. For such infested areas, the gall of the privet weevil should be reduced proportionately. Repeat if needed, but make no more than 3 to 4 applications in a single season. NOTE: Use only on plantings 2 years old or older. Do not apply within 30 days before harvest.

ALFALFA

Apply to established stands during the dormant season or after grazing in winter to control winter annual weeds or apply immediately after the first cutting but before regrowth starts to control spring and summer annual weeds. For aerial application, use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 20 gallons of diesel oil or herbicidal oil per acre. For ground equipment use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 20 gallons of diesel oil or herbicidal oil and make up to 100 gallons with water. Apply the mixture to thoroughly wet all weed foliage using approximately 100 gallons per acre. The higher dosage and large amounts of oil are needed where grassy weeds are the major problem. NOTE: Do not graze or feed alfalfa from treated areas within 6 weeks after application.

ALFALFA, TREFOLI, CLOVER, PEAS AND SOYBEANS BROWN FOR SEED

(PRERESTRAINS SPRAYING TO FACILITATE HARVEST.)

Apply 3 to 6 days before harvest. For aerial application use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 10 gallons of diesel oil or herbicidal oil per acre. For ground application use 2 to 4 pints of UNIROYAL DINOSER-B in 5 to 10 gallons of diesel oil or herbicidal oil per acre. This may be mixed with 8 to 15 gallons of oil, with low volume sprays for a minimum of 20 gallons finished spray per acre, or with 5 to 15 gallons of oil plus 25 to 50 gallons of water for high volume sprays. The highrate and volumes are suggested for use during cool, cloudy weather and where there is heavy foliage growth. Do not allow seed or forage from treated areas to be used for livestock or feed purposes. Do not graze new growth in treated areas. Do not apply within 30 days before harvest.

POLE VINES

(TOP KILL FOR HARVEST)
GROUND COVER (DIRECTED SPRAY)

For citrus, date, olive, and nut groves including almonds, filberts, pecans, and walnuts deciduous fruit orchards including apples, apricots, cherries, peaches, nectarines, figs, pears, plums, and prunes; ditch banks; and along drainage canals. Mix 1-6 quarts UNROYAL DINOSEB-5 in 2-20 gallons of diesel or any herbicidal oil and not apply more than 100 gallons of spray. Apply as coarse spray and thoroughly cover all weed foliage. Do not apply within 20 days of harvest. Destroy any such fruit to prevent further infection. Use 1 quart of UNROYAL DINOSEB-5 with 5 gallons of fuel or diesel oil in enough water to make 100 gallons of spray. Provide continuous agitation when mixing and until spraying is finished. Make the first application to the ground and the last two feet of the hop bines when they have reached four feet or more in height. Use at the rate of 50 gallons per acre. Repeat as necessary, but use no more than four applications per growing season. When the plants have reached 3/4 of the distance to the top of the trusses, the basal 4 feet of the bines should be sprayed. The gallonage required for the defoliation of the basal four feet of the bines will need to be increased proportionately. These treatments will materially aid in the control of weeds. USE PRECAUTION: Do not apply to young plants in mature replants or to flowers in “baby” yards. Do not apply within 14 days of harvest.

IMPORTANT NOTICE — Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label. Under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label directions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.
Attachment D

DNR’s “Contained Out” Provision for Soil or Water.

This provision is only for contaminated soil or water determined to be waste and does not apply to contaminated media that are considered “products”. This is adapted from the DNR’s Remediation and Redevelopment guidance entitled “Guidance for Hazardous Waste Remediation – DRAFT- Pub number RR-705 - 11/21/2002”.

A. Soil or groundwater containing a listed waste

Contaminated soil or groundwater is itself not hazardous waste but may require management as a hazardous waste if it contains listed hazardous waste. EPA guidance indicates that media containing hazardous constituents from listed hazardous waste above health based levels is considered to contain hazardous waste. For purposes of this MOU, soil or water contaminated with a listed hazardous waste will no longer be considered to contain a listed hazardous waste if any of the following criteria are met.

1. Soil
   Contaminated soil containing listed hazardous waste remains hazardous until one of the following two criteria are met.
   • If the ch. NR 720 table values or site specific Residual Contaminant Levels (RCLs) are met then the soil can obtain a “contained out” determination and be managed in accordance with the provisions in ch. NR 718.
   • A “contained out” determination can be made when the constituents of concern are below site specific, direct contact (i.e. ingestion / inhalation) health based levels that are calculated using the general provisions in s. NR 720.19(5). If a contained out determination has been made, the contaminated soil can be managed in an approved solid waste landfill. However, it is not necessary to calculate/determine a cumulative excess cancer risk or a cumulative hazard index value when making “contained-out” determinations, if disposal will occur in an approved solid waste landfill. As required by EPA guidance, if a generator or RP wishes to pursue a “contained-out” determination for contaminated media, Department approval of the calculated levels is necessary.

   DNR Remediation and Redevelopment guidance “Determining Residual Contaminant Levels Using the EPA Soil Screening Level Web Site - PUB-RR-682. January 11, 2002” may be used to determine RCL’s.

2. Groundwater
   Contaminated water containing a listed waste remains hazardous until the ch. NR 140 Enforcement Standard (ES) is met.

B. Soil or Water Exhibiting a Hazardous Characteristic

Contaminated soil or water that exhibits a hazardous characteristic upon generation also requires management as a hazardous waste. In these cases the media remains subject to hazardous waste rules until the characteristic is no longer present. Treated media may remain subject to Land Disposal Restrictions even if they no longer have a hazardous characteristic.
MOU Between DATCP and DNR on Discharge of Hazardous Substances

Attachment E

**Landspreading of Soil Containing Residual Levels of Persistent Chlorinated Pesticide Compounds Resulting from Product Use on the Land.**

The following table lists persistent chlorinated pesticide compounds that may be commonly found in soils at remediation sites. Columns B and C list the maximum allowable concentration of each compound in contaminated soils and the maximum allowable rate at which these contaminated soils may be landspread under a DATCP permit without DNR concurrence, under Section V(D)2. of the DATCP - DNR MOU. Landspreading of soils containing higher levels of contamination, or at higher application rates, is only allowed if jointly approved by DATCP and DNR. DATCP and DNR have agreed on these maximum allowable soil concentrations and maximum allowable landspreading rates based on the historic single use application rates listed in Column A for the specific compounds.

<table>
<thead>
<tr>
<th>Pesticide:</th>
<th>Historic single use application rates</th>
<th>Maximum allowable concentration in soil to be landspread (the historic label rate [with a 10 ppm maximum])</th>
<th>Maximum allowable application rate without joint agency approval (5% of historic label rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldrin</td>
<td>0.5 – 5</td>
<td>2.5</td>
<td>0.25</td>
</tr>
<tr>
<td>Chlordane</td>
<td>1-10</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td>DDT</td>
<td>5-7.5</td>
<td>3.75</td>
<td>0.375</td>
</tr>
<tr>
<td>Dieldrin</td>
<td>0.5 – 5</td>
<td>2.5</td>
<td>0.25</td>
</tr>
<tr>
<td>Endrin</td>
<td>0.125 - 1</td>
<td>0.5</td>
<td>0.05</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>0.25 – 4</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Methoxychlor</td>
<td>0.25 – 0.5</td>
<td>0.25</td>
<td>0.025</td>
</tr>
<tr>
<td>2,4,5-T</td>
<td>1 – 12</td>
<td>6</td>
<td>0.6</td>
</tr>
</tbody>
</table>

*Additional compounds may be added to this list as agreed to between DATCP and DNR.*