



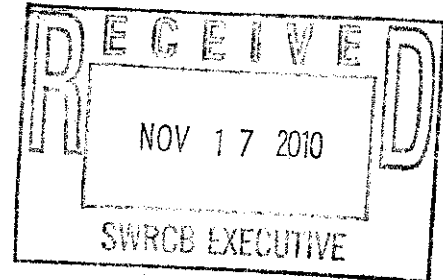
SAN FRANCISCO  
**BAYKEEPER.**

November 17, 2010

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814

*Via electronic mail to [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)*

**Re: Comment Letter – Draft Spray Applications Permit**



Dear Members of the State Board:

Thank you for accepting the following comments that we submit on behalf of San Francisco Baykeeper (“Baykeeper”) and our 1,500 members. We are writing to express our concerns over the draft Spray Applications Permit (“Draft Permit”), with the goal of minimizing discharges of pesticides into California’s limited and critical water resources. Baykeeper requests that the following changes be made to the Draft Permit to ensure that the Permit incorporates all federal and state requirements and adequately protects water quality in the San Francisco Bay Region.

**I. The Draft Permit should require a separate Notice of Intent (NOI) and Pesticide Action Plan (PAP) for each separate pest control program operated by the discharger in each different area covered.**

The Draft Permit should require dischargers to develop site-specific pest control plans, and should not accept generalized, state wide plans. For example, the CDFA could submit only one state-wide PAP that covers their seven different pest control eradication programs described in the Factsheet generally,<sup>1</sup> without tailoring the plan to each specific pesticide product or site-specific water quality limitation or BMP. In theory, the Draft Permit favors “flexibility” in the development of Best Management Practices (BMPs) that will allow “dischargers to implement appropriate BMPs for different types of applications and different types of waters.”<sup>2</sup> However, in order for the discharger to truly evaluate different types of applications at different types of water, the Draft Permit should require a separate NOI and/or PAP analysis for each covered water body and area.

The Draft Permit should also apply to all dischargers of the permitted pesticide products (similar to the Draft Vector Control and Aquatic Invasive Species Permits), or should at least provide a rationale for why only two governmental agencies are subject to the Draft Permit’s requirements. Under *National Cotton Council of America v. USEPA*, 553 F.3d 927 (6th Cir. 2009), the Clean Water Act requires a permit for all point source pesticide discharges to jurisdictional waters. Because the Draft Permit covers discharges by the CDFA and USFS only, it omits evaluation and regulation of potentially-large sources of pesticide discharges from other entities that

<sup>1</sup> At D-8-11.

<sup>2</sup> At D-22.



individually or collectively could cause or contribute to an excursion above a state water quality standard.

Finally, the NOI instructions should explicitly state in the Notice of Intent Status section that the submission of a new NOI or "Change of Information" will be required whenever a different pesticide is used or a different organism is targeted.

## **II. The Draft Permit should enumerate additional provisions enabling full public review and citizen enforcement.**

The Draft Permit should enumerate additional provisions to enable full public comment and agency review.<sup>3</sup> The public has a right to know about pesticide discharges before and after they occur.

- Before any discharge, an applicant's NOI and PAP should be made available online for public notice and comment for 30 days before the Board decides to issue a Notice of Applicability (NOA), allowing sufficient time for public input before approval may be granted.<sup>4</sup> Only the PAP contains the specific technology-based effluent limitations, or BMPs for pesticide applications, and the PAP therefore must be included as part of the permit for public review and comment.<sup>5</sup>
- Once issued, the NOA should also be made available online to inform the public about what specific pesticides may be used and any specific limitations.
- All monitoring reports and data generated under the Draft Permit should be made available to the public for review, just as DMRs are required to be.<sup>6</sup>
- SMRs should be submitted monthly for periods in which any pesticide discharge occurs, as with most other DMRs and NPDES permits, and not merely on an annual basis as proposed in the Draft Permit.
- The SWRCB should implement random testing for pesticide residue and BMP implementation.
- In order to reflect the statute of limitations codified at 28 U.S.C. § 2462, dischargers should be required to retain records for a period of five years.<sup>7</sup> Any documents that dischargers are required to produce and retain should be available for public review pursuant to 33 U.S.C. § 1318(b).

<sup>3</sup> See 33 U.S.C. §§ 1251, 1311 & 1342.

<sup>4</sup> At D-14, the Factsheet should add to the Section II Notification requirements that permit coverage will be effective when, under sub-point (c), the PAP has been approved by the State Deputy Director *and* after a 30-day notice and comment period.

<sup>5</sup> See *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2<sup>nd</sup> Cir. 2005).

<sup>6</sup> See 33 U.S.C. § 1318(b); Draft Permit at B-4 ("Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. 40 C.F.R. § 122.41(1)(4)(i).").

<sup>7</sup> Draft Permit at B-3, requires document retention for 3 years.

**III. The Draft Permit should contain a more complete antidegradation analysis.**

The Draft Permit contains an incomplete antidegradation analysis.<sup>8</sup> The Factsheet argues that:

“The Basin Plans implement, and incorporate by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. § 131.12 and Resolution No. 68-16. The conditions of this General Permit require residual pesticide discharges to meet applicable water quality objectives. Waters of exceptional quality may be degraded due to the application of pesticides; however, it would only be temporary and in the best interest of the people of the State. While surface waters may be temporarily degraded; water quality standards and objectives will not be exceeded. The nature of pesticides is to be toxic in order to protect beneficial uses such as human health. However, compliance with receiving water limitations is required. Therefore, this General Permit is consistent with State and federal antidegradation policies.” At D-19.

The SWRCB Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. However, in the above antidegradation analysis the SWRCB uses unsubstantiated assumptions to justify its conclusion that the Draft Permit complies with antidegradation policies. First, this analysis assumes that the conditions of the Permit fulfill and meet all applicable water quality objectives, when, for instance the Draft Permit does not provide a complete explanation of all applicable water quality standards and objectives and what they specifically require. At times, subsections included in the Findings section seem to summarily conclude that the conditions of an applicable water quality objective are met through the Permit alone, without stating what the specific applicable water quality objective even is, much less what it specifically requires. Second, the excerpt assumes degradation to exceptional quality waters would only be temporary, when the Draft Permit allows multiple-applications at indefinite intervals at the discretion of the discharger.

Third, the excerpt assumes that waters of exceptional quality degraded by the application of pesticides is “in the best interest of the people of the State” without providing specific findings used to justify such a conclusion.<sup>9</sup> Fourth, the excerpt assumes water quality standards and

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<sup>8</sup> See requirements at CWA § 101(a); 40 C.F.R. § 131.12; SWRCB's Antidegradation Policy (Resolution 68-16); and CWC §§ 13146; 13247.

<sup>9</sup> E.g. A given application of pesticides may not be in the best interest of the people of California when, for example, the Draft Permit gives no guidance as to how to calculate actionable threshold populations of pests. This determination is left to the discharger, and not necessarily knowing the threshold populations where a public health risk exists, a discharger could set the threshold too low and apply pesticides where it is not needed or where it is actually contrary to the best interests of the public at large. For instance, several risks from the USFS' area-wide aerial tree insect control program exist. The Factsheet describes that “Area-wide control using a fixed wing aircraft covers an entire infested area and the acreage is very large; therefore, it is difficult to avoid most streams within the control area, although larger lakes and rivers can be avoided.” At D-12. Deleterious effects can result from aerial spraying that are difficult to control and not necessarily in the public's best interest. Meanwhile, it is impossible to weigh what truly is in the best public interest when the Draft Permit is also silent on the relative risk versus harm, or threat from respective pests as well. For instance, the Factsheet does not describe the threat from beetles, fruit flies, or moths under the CDFA pest control programs, at D-8-11, and a given application could be overzealous and easily not in the best interest of the public.

objectives will not be exceeded when the permit does not cover all dischargers of the pesticide products covered and the receiving water may be subject to a barrage of chemicals not included in the "Receiving Water Monitoring Triggers" table. Table 3 in the Permit lists only 16 ingredients of concern,<sup>10</sup> when there are potentially thousands of active and inert ingredients used in pesticides. Therefore, an applicable water quality standard could be violated yet escape detection merely because a relevant ingredient was not deemed "of concern" at the right time. Fifth and finally, just because receiving water limitations are included<sup>11</sup> does not mean *all* applicable water quality standards and objectives will be met. For example, the Factsheet explains that the Draft Permit does not include Receiving Water Monitor Triggers and does not require monitoring for several ingredients like NPV, Spinosad, tricylopyr TEA, etc. Yet the presence of un-monitored ingredients in a given waterbody can act synergistically, resulting in an exceedance of an applicable water quality standard or objective.

To further elaborate, in regard to the Draft Permit's prohibition of discharge of residual pesticides and their degradation by-products to water bodies that are already impaired and listed under Section 303(d) due to the product's active ingredients or their degradation by-products,<sup>12</sup> this formulation is inadequate to protect the 303(d) list of impaired water bodies. Pesticide discharges can have additive or synergistic toxicological effects with other pesticides, a factor which FIFRA's risk assessment fails to take into account and will not be met through mere adherence to label instructions. For this reason the SWRCB should disallow coverage for discharges into waters that are listed as impaired for any parameters known to exacerbate any deleterious effect on non-target organisms of the specific pesticide being discharged. This should include impairment for any pollutant parameter (such as mercury) that may increase an organism's susceptibility to pesticide toxicants, as well as water quality conditions (such as low dissolved oxygen) that may do so. Therefore, the SWRCB should also exclude from coverage under the Draft Permit all pesticide discharges to waters that: 1) are impaired for pesticides generally, 2) are impaired for substances known to exacerbate the harmful effects of pesticides, and/or 3) impaired by any constituent of the pesticide being discharged.

The SWRCB should undergo a complete antidegradation analysis by conducting a more thorough review of existing areas and existing practices where the potential exists for this Permit to result in a degradation of water quality standards. Ideally, the SWRCB should provide a more complete list of all applicable water quality objectives, what they each require relevant to the proposed activity, how activities performed pursuant to provisions of the Permit do or do not meet the relevant water quality standard, and whether the particular objective or standard requires further activity on behalf of the discharger.

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<sup>10</sup> At 13; D-54.

<sup>11</sup> The Draft Permit clarifies that "information regarding residual pesticides deposited in the receiving water as a result of spray applications is not adequate to develop receiving water limitations for individual and combinations of pesticides; therefore, this General Permit only contains Receiving Water Monitoring Triggers." At D-27. However, the Draft Permit includes Receiving Water Limitations for (A) floating material, (B) settleable substances, (C) suspended material, (D) taste and odors, (E) toxic pollutants, (F) temperature, (G) color, and (H) aquatic communities. At 12-13.

<sup>12</sup> At D-20.

**IV. The Draft Permit should provide better guidance and oversight for implementing the "least intrusive method" and other pollution minimization measures.**

The unequivocal purpose of the CWA is to eliminate the discharge of pollutants into navigable waters.<sup>13</sup> Thus, the ultimate purpose of the SWRCB's draft Spray Applications General Permit is to eliminate the application of pesticide residues to California's waters to the maximum extent possible. The Draft Permit should explicitly require the use of the least toxic alternative or require that non-toxic methods of pest control be tried first, and set objective standards for BMPs. This is legally necessary under 40 C.F.R. 131.12(a)(2), which prohibits new or increased discharges to the nation's waters that are not necessary to accommodate important social or economic development.

**A. The Permit should explicitly require the least toxic alternative.**

Under the Draft Permit, the discharger has a duty to mitigate effects to water quality from pesticide applications and must take all reasonable steps to minimize or prevent any discharge.<sup>14</sup> This pollution minimization requirement and guidance for undertaking an alternatives analysis should be more explicit in the Permit. The Draft Permit currently states that:

"Dischargers are required to consider alternative control measures to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts. If the Discharger identifies alternative control measures to the selected pesticide application project that could reduce potential water quality impacts and that are also feasible, practicable, and cost-effective, the Discharger shall implement the identified alternative measures. The selection of control measures that use non-toxic and less toxic alternatives is an example of an effective BMP." At D-23.

However, the Draft Permit should not merely suggest that selection of less toxic alternatives is an example of an effective BMP. Rather, in order to truly 'minimize' discharges of pesticides the Draft Permit should contain an explicit presumptive preference for non-toxic alternatives to pesticide use in every case. The discharge of pesticides to water should only be allowed in situations where non-toxic alternatives have been tried and found to be unsuccessful. In that case, the Permit should require that preference be given to the safest pesticide evaluated in the lowest effective amount. The Draft Permit should explicitly include these strict minimization requirements in Section VIII.C.14, where the Permit lists requirements for examining the Possibility of Alternatives contained in the PAP. These least-toxic requirements could help clarify sub-point (b) suggesting dischargers use "the least intrusive method of pesticide application," and sub-point (d) suggesting dischargers apply "a decision matrix concept to the choice of the most appropriate formulation."<sup>15</sup> The Draft Permit should give dischargers more guidance on what "a decision matrix concept" looks like, and define what an "appropriate formulation" of an alternatives analysis is by giving concrete guidance and prioritization criteria dischargers must abide by when deciding their preferred alternative. In the absence of numeric

<sup>13</sup> See, 33 U.S.C. § 1251(a)(1).

<sup>14</sup> Draft Permit at D-15; B-1, citing, 40 C.F.R. § 122.41(d).

<sup>15</sup> At 16.

discharge limits, enforcement of these minimization requirements will be absolutely essential for protecting water quality.

**B. *The Draft Permit should set objective standards for BMPs.***

The SWRCB should set objective standards for when pesticide use is allowed and should develop guidelines regarding what comprises BMPs in the pesticide spray application context. As currently written, the discharger has considerable discretion in deciding the resulting discharge of pesticides into California's waters through private choices and action plans developed in the PAP. The Draft Permit fails to specify or designate which practices are considered BMPs, favoring "flexibility" instead.<sup>16</sup> Thus, neither the Permit nor the Factsheet actually describe the particular management technologies that will control each applicator's discharges. While "flexibility" is desirable in order to tailor BMPs to individual circumstances, it does not preclude the SWRCB from providing more demonstrative examples of applicable BMPs, pinpointing where approved BMPs can be found in the pesticide spray application and off-target drift management context,<sup>17</sup> and giving additional guidance as to what methodologies are least intrusive. The SWRCB could also revise the Draft Permit or promulgate a guidance document to include prescribed categories of BAT/BCT for each similar use pattern: urban, agricultural, and wetlands,<sup>18</sup> give lists of non-toxic alternatives that exist for each use pattern, and provide specific ways of reducing environmental impacts when pesticides must be used. As written, the requirements set forth in the Draft Permit are too generic to provide meaningful guidance on what specific practices reflect the application of technology that is the best available.

The Draft Permit needs to enumerate objective criteria for dischargers to evaluate and choose between BMPs, and needs additional guidance as to what some specific criteria require, such as guidelines to help the discharger establish densities for larval and adult pest populations to serve as action threshold(s) for implementing pest management strategies. Not all pesticide applicators have experience in determining whether and when actionable thresholds of pest populations are met, and allowing the regulated party to define the terms of regulation appears to be illegal under the CWA. Instead, the Draft Permit should set objective, scientifically-derived guidelines for the establishment of 'action thresholds' allowing pesticide use. Furthermore, the SWRCB should

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<sup>16</sup> At D-22.

<sup>17</sup> E.g. The PAP includes a requirement to ensure that all reasonable precautions are taken to prevent Off-Target Spray Drift, and if applicable, to describe details of a buffer zone that will be used to prevent off-target spray drift. However, the Draft Permit does not give any guidance or standardization on what would be an effective buffer zone as a BMP. At 15.

<sup>18</sup> Note that the Draft Permit merely concludes that the "BMPs required herein constitute BAT and BCT and will be implemented to minimize the area and duration of impacts caused by the discharge of pesticides in the target area..." At D-22. However, the Factsheet does not explain how unspecified BMPs meet the governing BAT/BCT standards set forth in 33 U.S.C. §§ 1311, 1314, and 1316. The Draft Permit should show its BAT/BCT analysis, and how it satisfies the relevant technology standard of the Act. The Draft Permit also assumes "much of the BMP development has been incorporated into the pesticide regulation process by the USEPA, DPR, CDPH, and County Agricultural Commissioners... The pesticide use must be consistent with the pesticide label instructions and any Use Permits issued by County Agricultural Commissioners." At D-22-23. However, label instructions do not incorporate site-specific factors, and the Draft Permit needs to point to specific BMPs developed before it can assume all dischargers already know the relevant BMP framework.

specify that in calculating action thresholds, environmental and human health considerations should take precedence over those relating to economic, aesthetic, or other effects.

The Draft Permit should also further discuss various methods of pesticide application and attempt to categorize these generally according to the least intrusive method. The development and implementation of site-specific control measures or BMPs in the PAP is the only place where the best available and practicable technologies will be selected and required to reduce or eliminate pesticide discharge, and thus, its requirements must also be enforceable as a limitation in the Permit.<sup>19</sup>

#### **V. The Draft Permit should require clear and enforceable standards for individual monitoring.**

The Draft Permit should require individual monitoring by dischargers in order to provide meaningful data with which to review each individual discharger's compliance with permit requirements and water quality standards. Federal law requires that all NPDES permits specify "[r]equired monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity." 40 C.F.R. § 122.48(b). However, the Draft Permit seems to allow dischargers to choose between Coalition or individual monitoring,<sup>20</sup> and encourages a collective Watershed Management Approach (WMA).<sup>21</sup> The permit should not substitute group monitoring for individual monitoring because it is unclear how or whether individual liability could result from Coalition monitoring that uncovers an exceedance of water quality standards. In order to determine the water quality impacts, data on each individual discharger, specifics on which pesticide products were used,<sup>22</sup> and each individual water body are needed--not just the entire watershed.

Ideally, the Draft Permit should require water quality monitoring before and after each pesticide application, and require submission of monitoring reports on a monthly basis.<sup>23</sup> Dischargers are rightfully required to conduct monitoring before, during and after the pesticide application to ensure that non-target organisms are not adversely affected by the pesticide. However, the Draft Permit undercuts its own monitoring requirements, stating that the State Water Board Deputy Director of the Division of Water Quality may "approve reductions in monitoring frequencies if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted."<sup>24</sup> This provision does not enumerate the criteria with which the Deputy Director will approve or deny a request, while historically, the absence and lack of pesticide monitoring data supports the need for more, not less, monitoring requirements. The Factsheet states:

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<sup>19</sup> See *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2<sup>nd</sup> Cir. 2005).

<sup>20</sup> See Draft Permit at C-3.

<sup>21</sup> Draft Permit at C-6.

<sup>22</sup> For this reason, it is also insufficient for the PAP to only require the discharger to list the "types" of pesticides to be used. The PAP should require that the specific pesticide products to be used must be listed, along with their active ingredients.

<sup>23</sup> See Draft Permit at C-10. Requires SMRs annually, whereas they should be required monthly or after each application event.

<sup>24</sup> At 19; C-9, sub-point (v)(a)(5) enables monitoring samples to be reduced from a minimum of 6 samples on a case-by-case basis.

"In pesticide applications for pest control, it is reasonable to conclude that some residual pesticides will be deposited in surface waters. These residual pesticides may cause toxicity to aquatic life. However, information regarding residual pesticides deposited in the receiving water as a result of spray applications *is not adequate* to develop receiving water limitations for individual and combinations of pesticides; therefore, this General Permit only contains Receiving Water Monitoring Triggers... The monitoring triggers will be used to assess compliance with the narrative toxicity receiving water limitation and initiate additional investigations for the causes of toxicity caused by pesticides used and their additive or synergistic effects." At D-27 (emphasis added.)

**VI. The Draft Permit should require an actual deadline for corrective action.**

The "Corrective Action Deadlines" provision should be changed to include an actual deadline for changes to be made to BMPs before the next pesticide application event that results in a discharge. The Permit should omit the language currently allowing a corrective action "as soon as possible thereafter" if it is not "practicable" for the discharger to change application measures before the next pesticide application.<sup>25</sup> This language could allow an exceedance of a water quality standard or objective for an indefinite amount of time. Instead, where the discharger ("and Regional or State Board," should be additionally specified in the text of this provision), determines corrective action is necessary, an applicator should not be allowed to discharge pesticides any further until the corrective action is taken. The Corrective Action Deadlines provision needs an actually-enforceable deadline, such as the Discharger is prohibited from any further applications and has 30 days to undertake the corrective action.

Also note that the five-day written report should still be required when reporting non-compliance regardless whether an oral report was received within 24 hours.<sup>26</sup> No criteria for determining a waiver is provided for in the Draft Permit, leaving room for abuse of discretion and lack of reviewability. In the case of adverse incidents, written documentation is necessary for the public to determine whether the Discharger is in compliance.

**VII. The Draft Permit should be updated regularly as better information on active and inert ingredients is gathered.**

The SWRCB must continue to update the monitoring triggers and add additional pesticide ingredients as soon as possible to protect navigable waters as required under the CWA. Pursuant to 40 C.F.R. § 122.44(d)(1)(i), NPDES permits must contain limits that control *all* pollutants that are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard. Whenever the Permit is re-opened to include additional monitoring triggers or other updates, the SWRCB must also provide for full public review and comments.

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<sup>25</sup> Draft Permit at 22.

<sup>26</sup> See, Draft Permit at 21.



**VIII. The Draft Permit should provide greater guidance and protections for endangered species.**

The Draft Permit should explicitly prohibit discharges of pesticides in areas that could adversely affect listed species. Even though the Draft Permit provides that the Discharger is responsible for meeting all ESA requirements,<sup>27</sup> the Draft Permit still provides hyperlinks to NMFS, NOAA, and the U.S. Fish & Wildlife Service for the federal list of endangered species. These hyperlinks should be included in the NOI Instructions to give dischargers more guidance where pesticide discharges could adversely affect listed species, and in regard to requirements to obtain an ESA Section 10 "take permit," at 16 U.S.C. § 1539. The SWRCB should identify any pesticides known to be hazardous to a protected species in consultation with the EPA and Fish & Wildlife Service.

Toward that end, and in the case of the San Francisco Bay Region, the Permit should reference provisions of the recent pesticide use Injunction issued by the U.S. District Court, N.D., in May 2010,<sup>28</sup> under which the EPA must develop and distribute a brochure detailing new interim pesticide use restrictions.<sup>29</sup> The CBD lawsuit was based on scientific evidence demonstrating potential harm to specific Bay Area wildlife from the specific pesticides evaluated, and demonstrates how the ESA may impose additional requirements. The Draft Permit or NOI form should include a hyperlink or somewhere reference the pesticide restrictions described in the EPA brochure or web-based interactive map.

CONCLUSION

Thank you for your consideration of these comments. We sincerely hope that with revisions, the draft Spray Applications Permit will provide more transparency regarding implementation of BMPs, minimization and avoidance measures and least toxic alternatives, as well as provide more information showing the water quality impacts from individual and collective pesticide use. Please contact me if you have any questions about these comments.

Sincerely,



Naomi Kim Melver  
Associate Attorney, San Francisco Baykeeper

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<sup>27</sup> At 11.

<sup>28</sup> U.S. District Court Injunction: *CBD v. EPA* (Case No.: 07-2794-JCS);  
<http://www.epa.gov/oppfead1/endanger/litstatus/stipulated-injuc.html>

<sup>29</sup> <http://www.epa.gov/espp/litstatus/use-limiation.html>