



23 December 2016

Environment Protection Authority

PO Box A290

Sydney South, NSW 1232

Re: Submission to EPA Review of the Load-Based Licensing Scheme

The Water Directorate welcomes the opportunity to make a submission on the Environment Protection Authority's (EPA) Review of the load-based licensing (LBL) scheme. NSW Water Directorate is a membership association that comprises 88 local water utilities across NSW. NSW Water Directorate's mission is to provide leadership and support to the local government water supply and sewerage industry in regional NSW.

NSW local water utilities own and operate sewage treatment plants throughout regional NSW. These sewage treatment plants are regulated by Environment Protection Licenses (EPL) issued by the EPA. The operation of EPLs, and load-based licensing in particular, can impact on a local water utility's ability to effectively operate its sewage treatment plants.

This submission contains a response to the focus questions, with recommendations tabled at the conclusion of the submission. The recommendations can be summarised as:

1. EPA work with DPI Water and NSW Health to ensure a whole of government approach to regulation of water utilities, to ensure cost effective utility investment in infrastructure upgrades.
2. EPA provide meaningful input into the long-term planning processes of local water utilities, which are governed by DPI Water's best practice management framework.
3. EPA consider whole of catchment environmental, social, public health and economic factors in the application of LBL.
4. Pollutant load reduction should be pursued in the most cost effective way, by establishing incentive structures that enable those best placed to maximise benefits or minimise costs to develop solutions and responses to environmental problems.

The implementation of these recommendations will improve the regulation of scheduled activities, and in particular, improve environmental outcomes while reducing the regulatory burden of load-based licensing on sewage treatment plants.

The Water Directorate would like to thank EPA for the opportunity to participate in this review, and looks forward to the review of the load-based licensing scheme. As the peak body representing local water utilities in NSW, the Water Directorate is keen to have an ongoing dialogue with EPA to improve the load-based licensing scheme and the regulation of sewage treatment plants.

Yours sincerely

A handwritten signature in black ink, appearing to be 'J Sharp', written over a faint rectangular stamp.

Jeff Sharp

Chair

1 NSW WATER DIRECTORATE

The Water Directorate is a voluntary member based organisation that represents 96% of all NSW local water utilities. Its mission is to provide leadership and advice to local water utilities. Our members:

- provide 89% of reticulated water outside metropolitan NSW
- manage \$23 billion in assets
- have 3.2 times more customers than Hunter Water

The Water Directorate was initiated by local government water and sewerage practitioners in 1998. Our founding members recognised that the structure and legislative framework for water authorities in NSW was not ideal following the abolition of the Department of Public Works which had previously acted as the overall co-ordinating agency and mentor for regional NSW. An industry specific association was formed to address the lack of coordination between government departments and local authorities as well as the declining level of technical advice provided by the state agencies.

Since our establishment, NSW Water Directorate has provided consistent state-wide management tools at a low cost to our members. As a result, we have:

- invested more than \$3.5 million on developing relevant guidelines and technical documents to support industry best practice
- co-managed an \$8.73 million investment by the Federal Government and members in a water loss management program saving 5.5 billion litres of water annually
- advocated for local water utilities including responding to the Armstrong/Gellatly Review, and a whole series of other Government reviews undertaken by Infrastructure Australia, the National Water Commission, the Productivity Commission and Infrastructure NSW
- supported the industry with valuable information through on-line discussion groups, technical workshops and informal mentoring not provided by State Government departments.

2 ACRONYMS

Acronym	Legislation
BOD	Biochemical Oxygen Demand
CPI	Consumer price index
DPI	Department of Primary Industries
EPA	Environment Protection Agency
EPL	Environment Protection License
FRT	Fee rate threshold
IPART	Independent Pricing and Regulatory Tribunal
IWCM	Integrated Water Cycle Management
LBL	Load-based licensing
LRA	Load reduction agreement
NPI	National Pollutant Inventory
NSW	New South Wales
O&G	Oil and grease
PCB	Polychlorinated biphenyls

Acronym	Legislation
PFU	Pollutant fee unit
PRP	Pollution reduction program
STP	Sewage treatment plant
TSS	Total suspended solids

3 RESPONSE TO FOCUS QUESTIONS

The EPA prepared an issues paper for the LBL review and requested public feedback. NSW Water Directorate surveyed its members to develop responses to the 42 focus questions contained in the LBL Issues Paper. The survey of the members was used to inform the responses below. Where a focus question has been omitted, no opinion is offered.

3.1 CHAPTER 3 – HOW EFFECTIVE HAS LBL BEEN?

Focus questions

1. How can the LBL scheme best complement other regulatory approaches?

The EPA and LBL scheme currently operate independently of other water industry regulators, including NSW Health and DPI Water. The independent nature of the LBL scheme can lead to perverse outcomes, where load reductions required by the LBL are not considered during DPI Water's Best Practice Management long-term planning process and/or requires approval under s 60 of the *Local Government Act 1993*. The LBL scheme should be coordinated with other water industry regulations and regulators to achieve a whole of government approach to water industry regulation. For example, while the EPA seeks to encourage recycling through the LBL, an effluent recycling scheme cannot be implemented without approval under s60 of the *Local Government Act 1993*.

The LBL scheme should be designed to complement other regulatory approaches. The complementary approach could be achieved by EPA working with other water industry regulators, DPI Water and NSW Health, in the development of water utility strategic documentation, such as Strategic Business Plans and Integrated Water Cycle Management (IWCM) plans. If EPA were to participate in the long-term planning processes of water utilities, load reductions could be assessed against alternatives and included in the Long Term Financial Plans. In addition, Local Land Services should be involved in long-term planning, particularly if environmental offsets are to be considered.

2. What should the role of LBL be?

The current role of the LBL is to:

- set clear minimum standards for environmental performance
- incorporate powerful incentives for ongoing pollution reduction
- give licensees flexibility to implement cost-effective pollution abatement methods
- increase regulatory transparency
- provide the infrastructure for emissions trading schemes
- enable the long-term tracking of emissions reductions.

NSW Water Directorate accepts that the current role of the LBL is appropriate and should be continued. In addition, the role of LBL in the water industry should be to:

- encourage best practice by local water utilities
- reduce the total pollution load at the lowest net cost, which may be achieved through actions such as catchment management offsets
- provide an alternative to the use of fines and other regulatory action when licence conditions are not met

3. What shouldn't its role be?

The role of the LBL scheme should be to encourage best practice pollution load reduction. The LBL scheme should not impose burdens on utilities that contradict other regulatory requirements. For example, DPI Water's Best Practice Management process, including IWCM and Strategic Business Planning, involves extensive financial modelling and community consultation in order to determine the community's pollution reduction priorities and willingness/ability to pay. EPA can negate this process through unilateral changes to the Environmental Protection Licences and LBL scheme, contradicting the requirements of other regulators and the wishes of the community.

The role of LBL in the water industry should not be to:

- Raise revenue without considering the social, public health and economic impacts of the additional charges
- Add costs for discharges of point source pollutants beyond levels required by regulation or licence conditions.
- Incentivise better performance than required within the licence

4. Do you think the LBL scheme has been effective? Why or why not?

The LBL has been effective for some pollutants in some industries. However, the LBL has been largely ineffective, as it targets point source pollution which is typically only a very small contribution to overall pollutant loads. The LBL scheme seeks to raise revenue from a few minor pollution sources whilst ignoring broader catchment activities and diffuse pollution sources.

The increasing trends in BOD and nitrogen discussed in the issues paper have been attributed to sewage treatment systems servicing growing populations. Sewage treatment infrastructure has a long lifecycle from strategy, concept, design and construction, through to augmentation or decommissioning. The process for conceiving, designing, approving and installing improvements to reduce the pollutant load forms part of the 8-year Best Management Practice process administered by DPI Water, which includes Strategic Business Plans and Integrated Water Cycle Management. Reductions in pollutant loads could be better achieved through the Best Management Practice process, which sets the 4-year price path and capital works program. Changes to the LBL scheme which occur outside the water utilities' long term planning framework are likely to be seen as a cost rather than an opportunity. For example, sewage treatment plants have an indicative useful life of 50 years (DPI Water, 2014). Many sewage treatment plants in regional NSW have been designed and constructed over the past 50 years without phosphorus removal. Phosphorus removal is difficult and expensive to retrofit to sewage treatment plants that have not been designed to achieve phosphorus removal. To impose increased LBL fees on utilities that have legacy infrastructure will have the effect of imposing a cost on these communities without achieving a reduction in the phosphorus pollutant load.

The current licencing regime focuses on individual EPLs rather than on the environmental impact of all the EPLs of a utility, even where all EPLs relate to the same catchment. The environmental improvement

achieved by upgrading one STP, for example, is not considered when EPA requires another STP in the same catchment to be upgraded. Bubble licences may be a solution to achieving maximum environmental improvements at the lowest cost.

The LBL scheme should be used as an incentive to ensure that STPs are being operated to reduce pollutant loads as efficiently as possible. In some instances, STPs are unable to produce the pollutant reductions required by the LBL. In other instances, the cost of the pollutant reductions required by the LBL far outweigh the benefits of the reduced pollutant loads. The EPA needs to be aware of the limitations and practicalities of operating particular types of STPs and not impose unrealistic targets.

5. What does an effective LBL scheme look like?

An effective LBL scheme works with other regulatory instruments to achieve a whole of government approach to reducing pollutant loads in an effective and efficient manner. LBL schemes may vary by industry in order to leverage the greatest benefit from other industry specific regulations. In the water industry, the LBL scheme could be embedded in, or work closely with, the Best Practice Management framework in order to achieve sustainable changes to the operation of sewage treatment plants. Consideration should be given on the need to upgrade older plants to meet nutrient concentration levels for discharge which may have marginal environmental benefit.

There should be an environmental offset approach to reducing pollutant loads. Funding of catchment management activities may result in a much larger environmental improvement at much lower cost when compared to upgrading an STP.

An effective LBL scheme could be used as a financial incentive for compliance with licence conditions, and provide an equitable economic incentive to alternative regulatory action such as Pollution Reduction Programs and fines.

Any other issues?

The issues paper (p 25) alludes to a significant increase in BOD fees to match the TSS fees. Many sewage treatment plants in regional NSW are limited to the BOD reduction they can achieve. As discussed above, any changes to the LBL fee structure outside water utilities' long-term planning frameworks are unlikely to result in expensive augmentation of sewage treatment infrastructure with a corresponding reduction in pollutant load. The costs will simply be borne by the impacted community. The EPA should work with water utilities and their communities through the long-term planning process to create intergenerational infrastructure that will achieve a long-term sustainable reduction in pollution load.

The EPA must contribute to a triple bottom line regulatory approach that considers the overall catchment activities and context, and balances environmental, social, public health and economic outcomes and considers the community's willingness and ability to pay. More stringent environmental requirements and costs should not be imposed without due consideration of the costs, and/or a contribution from the NSW Government to achieving improved treatment standards where imposed by the EPA.

In some instances, the current LBL scheme can be seen as contradictory, with treatment processes required to reduce the emission of one pollutant increasing emissions of another. For example, the carbon emissions required to reduce BOD may have a greater environmental impact than the BOD emissions. In addition, high dose rates of aluminium sulphate to reduce phosphorus to extremely low

concentrations may have more impact on the environment than the phosphorus emissions. A whole of environment approach is required rather than the current compartmentalised approach.

3.2 CHAPTER 4.2 – KEY ELEMENTS OF THE LBL SCHEME

Topic focus question – Assessable pollutants

1. Are there any particular issues with the current LBL pollutants, including the pollutants captured, definitions and weightings?

The water industry has load based licences for water pollutants for *Sewage treatment – Processing by small plants (up to 10,000 megalitres annual capacity)* and *Sewage treatment – Processing by large plants (more than 10,000 megalitres annual capacity)*. Small plants are subject to the LBL scheme for BOD, oil and grease, suspended solids, total nitrogen and total phosphorus. Large plants are subject to the LBL scheme for cadmium, chromium, copper, lead, mercury, pesticides & PCBs, selenium and zinc in addition to the small plant parameters.

In a well operated STP, the discharge of BOD, suspended solids, total nitrogen and total phosphorus is a function of the STP design, population characteristics and weather. As discussed above, after a STP has been designed and constructed, it is often difficult to make significant changes to the process. Changes to the LBL scheme are unlikely to be effective in reducing pollutant loads from sewage treatment plants. A better approach would be for the EPA to become involved in the water utilities' long term planning processes. During a wet year, loads from STPs will be higher than in dry years. The LBL scheme has no influence over the increased loads generated during wet years, and is simply a tax on the community in response to climatic conditions.

In the STP context, concentration limits are a better regulatory tool than load-based limits as they are within the control of the water utility and are largely climate independent. Most concentration limits on EPL's were established at the commencement of the licence usually in alignment with an environmental study undertaken at the time and taking into consideration the technical capability of the treatment process. However, there does not seem to be much scope for utilities to challenge the validity of concentration limits in cases where inappropriate limits may be set. e.g. 1 mg/L total phosphorous limits on an ocean outfall where the carbon footprint of alum dosing (chemical production and transport, increased sludge production, dewatering, cartage and disposal) is possibly causing more environmental harm than a relaxation of the total phosphorus limit would.

Load Based Limits should be calculated based on the required concentration limits so that if the concentration limits are consistently achieved, the load based penalties would be negligible.

Topic focus question – Load limits

1. Do you have any feedback/experience on the use of load limits that would assist the EPA to consider this issue?

The scale of operation of sewage treatment plants is, to a large extent, weather dependent, with Peak Wet Weather Flows often an order of magnitude greater than Average Dry Weather Flows. The pollutant loads from sewage treatment plants during wet years varies significantly due to the weather, and cannot be reduced by the actions of the operator.

The actual pollutant load from a STP does not increase significantly during wet weather as the concentrations are lower. The LBL calculation methodology assumes that the flow weighted concentrations calculated from the sample days applies to all releases from the STP. If annual discharge is much higher than normal due to a wet year, the flows on the actual sampling days could mean the local water utility pays for more mass of pollutants than was actually released. For most catchments, the pollution load from diffuse land use sources is much higher during periods of heavy rainfall, making the STP contribution to overall loadings less significant.

Load limits should be removed from scheduled activities whose scale of operating is weather dependent, including sewage treatment plants (Option 2).

Section focus questions

1. Do you consider any of the options described for assessable pollutants, critical zones, scheduled activities or load limits to be preferable? If so why?

Assessable pollutants – Option 2, *focus on the highest priority pollutants* is preferable to reduce the compliance and reporting burden on scheduled activities and licensees with little impact on the environment.

Critical zones – Option 2, *further developing and expanding on the principles of the ‘critical zone’ approach, rather than creating critical zones over some discreet areas, assign area-specific pollutant weightings across the state* is preferable to reduce the compliance and reporting burden on licensees who are outside environmentally sensitive areas.

Scheduled activities – Option 5, *pursue a combination of Options 2 and 3* is preferable to ensure the highest emitting scheduled activities and licensees are regulated whilst reducing the compliance and reporting burden on other scheduled activities and licensees.

Load limits – Option 2, *abolish load limits* is preferable as they are less effective than concentration limits. The calculation methodology (flow weighted to sampling days only) may not recognise that during higher flows the pollutant concentration is generally lower. Flows are measured continuously, while concentrations are only measured periodically (eg, weekly, fortnightly or monthly). Due to the skewed nature of the flows through STPS, measured high flows of unmeasured low concentration may not be offset by measured low flows of measured high concentration. However, the removal of load limits should not be replaced by the imposition of penalties each time a concentration limit is exceeded.

An LBL across all licenced premises would be an ideal solution if:

- the LBL Scheme is used as a form of incentive for compliance with concentration limits, though the concentration limits would need to be reasonable and relevant to the catchment context;
- is limited to those same pollutants; and
- replaces other regulatory action such as fines.

2. Do you consider any of the options to be impractical or unworkable in some way? If so, why?

Assessable pollutants – NSW Water Directorate considers either of the options to be practical and workable.

Critical zones – NSW Water Directorate considers either of the options to be practical and workable.

Scheduled activities – Option 1, *Extend the LBL scheme to cover all EPA licensees* is impractical and unworkable as it will impose a compliance and reporting burden on scheduled activities and licensees with very small environmental impact.

Load limits – NSW Water Directorate considers any of the options to be practical and workable.

4. Do you have any other suggestions for improvement?

EPA should reconsider the need for reporting of pollutants loads for which there is no weighting and no fee, for example BOD, salt and total phosphorus in open coastal waters and salt in estuarine waters. It is acknowledged that the information gathered may be useful for assessing whether changes may need to occur in the future, but this needs to be balanced against the cost of the regulatory burden.

Any other issues?

There should be some offset for LBL fees available for catchment management activities which reduce pollutant load in the environment. While this is a "theoretical" calculation, it is no more theoretical than, for instance applying the concentration of pollutants on 26 sampling days to 365 days of recorded flow.

EPA seems to view the LBL scheme as a revenue raising exercise, and something that is in addition to licence conditions. Given that the licencing system does not cover the vast majority of pollutant sources (i.e. diffuse land use sources), this is not an equitable position. However, if the LBL scheme were to be used as a regulatory "enforcement" tool instead, it could be very effective and provide an economic incentive for compliance, rather than for improvement beyond compliance requirements, which it fails to do at present. As such, LBL fees should only be payable on loads in excess of the concentration limits.

3.3 CHAPTER 4.3 – THE LBL FEE

Topic focus question – Fee rate thresholds

1. Has your business exceeded the FRT? If so, has this affected your decisions to reduce emissions?

A number of NSW Water Directorate members have, on occasion, exceeded the FRT. Exceeding the FRT encourages utilities to optimise the operation of existing infrastructure, though does not prompt the procurement of new infrastructure unless grant funding is available. Other utilities reported that they are looking to improve the performance of existing plants without the need for significant capital works.

Some utilities reported that FRT's are often exceeded, though this had no bearing on reducing emissions. As previously discussed, the calculation of pollutant loads for STP's is largely dependent upon wet weather events. While effluent may meet concentration limits, quite often the FRT will still be exceeded.

Topic focus questions – Weighted loads

1. Are there any barriers under the LBL scheme to appropriate effluent reuse and the use of green offset works?

Barriers and obstacles to effluent reuse include utility investment in infrastructure costs to obtain s60 *Local Government Act 1993*, and meet the requirements of the Australian Guidelines for Water Recycling, DPI Water's Recycled Water Management Systems guidelines, lack of EPA commitment to establishing effluent recycling schemes and the cost of infrastructure necessary to enable effluent recycling.

In order to establish a new effluent recycling scheme in NSW, a water utility must apply for approval under s 60 of the *Local Government Act 1993*. The application must include a Recycled Water Management System prepared in accordance with the DPI Water guidelines which is based on the Australian Guidelines for Water Recycling. The process to obtain approval under s 60 *Local Government Act 1993* can be daunting. EPA typically does not participate in the s 60 approval process, and there are numerous examples of EPA changing licence conditions after s 60 approval has been granted. In addition to the approval process, infrastructure costs can be significant to meet the requirements of the Australian Guidelines for Water Recycling. Some utilities are hesitant to make the capital investment required, knowing the EPA can change the licence conditions and render the scheme unworkable.

Green offsets are not common in the NSW water industry, though green offsets may be a low-cost alternative to expensive infrastructure upgrades. The main barrier to the use of green offsets is the lack of meaningful commitment by EPA to green offset implementation. EPA needs to consider the catchment context, rather than a focus on point sources. The application of LBL to only the point sources does not provide an equitable outcome when the catchment context is considered.

2. Are load fees providing an incentive for licensees to implement appropriate reuse management options and green offsets? If not, how could the incentive be improved?

Load fees are not providing an incentive for licensees to implement appropriate reuse management options, as they are counteracted by the above-mentioned impediments. Removal of impediments and provision of grants would provide a greater incentive for effluent reuse than punitive load fees.

Raising revenue from point sources at STPs only serves to reduce the funding that could otherwise be available for environmental improvements. Reduced utility funding combined with a lack of external funding creates a negative outcome for catchment health.

3. If you've been considering effluent reuse or offsets, what has your experience been? What has stopped you from adopting these approaches?

Effluent reuse is business as usual in some sectors of the water industry. However, the approval process can be complex, requiring time, funding and expertise that may not be available within the individual water utility.

Effluent reuse often provides only a dry weather solution, and removes water from the river system when it is most needed. Effluent reuse does not suit all catchments, particularly at the head of a catchment and particularly not at the time when the rivers needs the water the most, which is also the time when effluent reuse schemes have their highest demand. Effluent reuse by "land disposal" is not an effective solution in the greater catchment context in these cases, and is more often than not a much higher capital and operational cost than river releases.

Barriers to implementing effluent reuse schemes include the complexity of obtaining section 60 approval through DPI Water. Section 60 application for effluent reuse schemes have proven to be a time and resource consuming process.

Barriers to adopting green offsets include resistance from EPA to consider green offsets.

4. Do you have any suggestions for how the LBL scheme can be amended to encourage additional effluent reuse, where appropriate?

LBL fees should be used to fund load reduction activities. At present, LBL fees are a tax on local water utilities, and restrict their ability to fund pollution reducing upgrades.

Section focus questions

1. Do you consider any of the options described above for improving the pollutant fee unit, critical zone weightings, fee rate thresholds, weighted loads or the administrative/load fee discount to be preferable? If so why?

Pollutant fee unit – Option 1, *maintain the status quo – a standard increase in the PFU to account for CPI* is preferable as EPA has not justified the need for increasing the PFU above CPI.

Critical zone weightings – Option 1, *maintain the status quo – assign critical zone weightings for target pollutants to reflect the relative priorities for reducing each pollutant in those areas* is preferable, as it has not been demonstrated that EPA has the information necessary to accurately estimate abatement or damage costs.

Fee rate thresholds – Option 1, *remove fee rate thresholds* is preferable as it has not been demonstrated that fee rate thresholds have influenced utilities to reduce pollution loads.

Weighted loads – Option 1, *develop a green offsets policy to complement the LBL scheme* is preferable as there may be cases where pollutant load reduction can be achieved more effectively and efficiently off-site.

Administrative/load fee discount – NSW Water Directorate does not consider the only option provided, *Remove the current administrative/load fee discount*, to provide a positive outcome for its members.

2. Do you consider any of the above options to be impractical or unworkable in some way? If so, why?

Pollutant fee unit – Option 2, *apply a moderate increase to the PFU* is impractical as it would reduce the funds available to local water utilities for implementing load reduction measures.

Critical zone weightings – Options 2 and 3 are impractical or unworkable as EPA has not demonstrated that it has the information necessary to accurately estimate abatement or damage costs.

Fee rate thresholds – Options 2 and 3 are impractical or unworkable as EPA has not demonstrated that fee rate thresholds have influenced utilities to reduce pollution loads.

Weighted loads – NSW Water Directorate considers the only option presented to be practical and workable.

Administrative/load fee discount – Option 1. NSW Water Directorate cannot endorse an increase in fees to its members without a corresponding increase in services to its members.

3.4 CHAPTER 4.4 – OTHER ISSUES AFFECTING COST AND REVENUE

Topic focus questions – Compliance costs

1. What compliance costs does your business incur as a result of the LBL scheme? Please indicate if you have already provided the EPA with this information through the LBL survey.

Some water utilities have estimated their LBL compliance costs to be between \$5,000-10,000 per year, including analysis costs and administration fees.

Additional LBL costs include:

- sampling and analysis requirements
- staff time taken to compile annual report (data collection, administration, calculations etc.)
- capital expenditure on PRP requirements
- increased operational costs to meet stringent limits (i.e. alum dosing etc.)

2. Are you incurring high compliance costs in relation to pollutants that you do not emit, or that you emit in very small quantities? Please give details.

Advanced sewage treatment plants incur relatively high compliance costs for the emission of pollutants that are at the limit of detection, such as TSS, O&G, BOD.

In addition, STPs emit a very small percentage of the total pollutant load in the catchment. STPs incur a relatively high compliance cost for a very small percentage of the pollutant load, especially when compared to diffuse sources, which emit the majority of the pollutant load and incur no compliance costs.

3. To what extent do you use the same process to collect information for LBL and NPI reporting purposes?

Most utilities reported that a common dataset is used LBL and NPI reporting, especially where the licence anniversary date aligns with NPI reporting. In addition, LBL and NPI reporting involves the same pollutants, so no additional testing, sampling or data collection costs, and that LBL calculations are used to compile the NPI report by extracting and using the same information but presenting it in slightly different ways.

However, a few utilities reported that they did not use the same process to collect information for LBL and NPI reporting purposes.

4. Would an online LBL portal for calculating and reporting loads reduce processing time and compliance costs for your business? What functionality would you like to see in such a system?

An online LBL portal for calculating and reporting loads would reduce processing time and compliance costs. However, to be effective, the online portal must be coordinated with the reporting requirements for:

- EPA Annual Return
- EPA Annual Systems Performance Report
- NPI Report
- DPI Water Performance Monitoring Report
- National Performance Report
- All other government reporting of similar information

To make the online portal truly effective, functionality should be included for notifying pollution incidents causing or threatening to material harm to the environment. The single notification could then be distributed to the relevant authorities, including:

- a) the appropriate regulatory authority,
- b) if the EPA is not the appropriate regulatory authority—the EPA,
- c) if the EPA is the appropriate regulatory authority—the local authority for the area in which the pollution incident occurs,
- d) the Ministry of Health,
- e) SafeWork NSW as referred to in c 1 of sch 2 to the *Work Health and Safety Act 2011*,
- f) Fire and Rescue NSW.

A single notification portal would free up management and staff time to respond to the pollution incident.

5. How could the Load Calculation Protocol of the LBL scheme generally be improved to reduce compliance costs?

The Load Calculation Protocol of the LBL scheme could be improved by:

1. Removing the requirement to monitor, calculate and report pollutants loads for which there is no weighting e.g. BOD, salt and total phosphorus in open coastal waters and salt in estuarine waters.
2. Removing the LBL fees charged for pollutant concentrations that do not exceed concentration limits. The LBL should provide financial incentive and punishment to those who do not meet licence conditions, not to raise revenue from those who do.

6. Would access to an EPA LBL Technical Unit assist you in working through technical questions? What services should this unit provide? Would you be prepared to pay for some specialist services?

An EPA LBL Technical Unit would not assist local water utilities working through technical questions. Technical questions should be answerable by the EPA regional officer. In cases where the LBL load calculation protocol is so complex that the EPA regional officer cannot respond to the technical queries, the LBL load calculation protocol should be simplified. However, the advice provided by EPA varies significantly between regions, between offices with regions, and between officers within offices. EPA needs to ensure that its officers provide consistent and correct advice, and that other EPA staff are bound by that advice. There is concern within the water industry that EPA regional officers would not be bound by, or disregard, decisions of a central LBL Technical Unit.

NSW Water Directorate's members would not be prepared to pay for additional bureaucracy that should be handled at the local level.

Topic focus questions – Load reduction agreements

1. For licensees, what factors have deterred you from seeking LRAs for your activities?

The following factors have deterred NSW water utilities from seeking LRAs:

- The methodology for calculating LBLs which applies the flow weighted concentration from the sample days to the entire year makes it impossible to guarantee a reduction (e.g. wet weather, development, growth, etc);

- Unwillingness of EPA officers to consider the broader catchment context or the social and economic impacts of such agreements;
- Lack of genuine negotiation; and
- Lack of a third-party mediator or whole of government approach, with only the Land and Environment Court available to licensees for resolution of issues.

2. Do you have clear information about your emissions to help you determine where an LRA might deliver the biggest benefits? If not, how could this be addressed?

NSW Water Directorate members provided a mixed response, with roughly half indicating they did have clear information about their emissions to help them determine whether an LRA might deliver benefits, while the other half did not.

Some utilities require further information to help them determine whether an LRA might deliver benefits. In addition, EPA should work cooperatively with local water utilities to encourage the use of LRAs.

3. Why have PRPs been more successful than LRAs at achieving positive environmental outcomes?

PRPs have not been successful. PRPs are imposed without due consideration of environmental, social or economic impacts, rather than through negotiation and an understanding of the broader catchment context and whole of government policy and funding positions. PRPs appear to be successful, as they quickly generate action, though the actions required by PRPs may be ineffective, inefficient, or not socially justifiable.

LRAs are less effective at achieving outcomes, positive or negative, than PRPs. LRAs are less effective in generating action as they require negotiation and agreement between EPA and the licensee, where licensees are able to consider the actual environmental impact, the utility's ability to pay, the community's willingness to pay, the technical issues and approval requirements. During LRA negotiations, EPA is negotiating from a position of power whereas the licensee is negotiating from a position of weakness. This imbalance is unlikely to create a mutually beneficial outcome, resulting in lack of agreement of outcomes required.

PRPs can be imposed unilaterally by EPA, negating the need for agreement and mutually beneficial outcomes. There is a perception within some sectors of the water industry that PRPs are used by EPA as a punitive measure against a water utility for perceived non-compliance where the non-compliance cannot be proven. PRPs typically involve large capital expenditure by a water utility that cannot be justified in the absence of a PRP, are not part of the strategic business plan, long term financial plan and price path, and cannot be completed within the current financial year's existing budget. In addition, PRPs often require the approval of other regulators, who may be unwilling or unable to grant the necessary approvals. PRPs appear to be more successful than LRAs as they require rapid action, regardless of whether it is justifiable, desirable, effective or sustainable.

Topic focus question – Revenue

1. Should there be some form of revenue recycling associated with the LBL scheme? If so, what should the revenue be used for?

The LBL scheme should include some form of revenue recycling. Fees collected through the LBL scheme should be set aside for a grant scheme to reduce pollution. Grants should be issued based on the following priority:

- Location:
 - Same catchment or airshed as fee collected
 - Other catchment or airshed
- Pollutant:
 - Pollutant the fee was collected for
 - Other LBL pollutant
 - Other pollutant
- Recipient:
 - Licensee who paid the fee
 - Other licensee of same activity
 - Other licensee
 - Any other applicant

Section focus questions

1. Do you consider any of the options described above for improving compliance costs, load reduction agreements or the use of revenue to be preferable? If so why?

Compliance costs – Option 1, *Modernise the LBL calculation and reporting process* is preferable. The modernisation could be achieved by creating a web based reporting portal that can be utilised for all EPA reporting, and preferably utilised for all similar NSW and Federal government reporting.

Load reduction agreements – Option 1, *Increase the flexibility of load reduction agreements* is preferable to ensure water utilities receive actual benefits from the process and are not penalised for delays beyond their control e.g. approvals required from EPA and other government departments.

Use of revenue – Option 1, *Establish a grants program for emission reduction initiatives at LBL premises* is preferable as it will result in additional reduction of pollutant loads.

The LBL scheme could be used as a means to encourage compliance with licence conditions, and as such would create a more consistent and uniform compliance management system, raise revenue for funding improvements in other areas, and avoid the need for fines and other regulatory compliance actions.

2. Do you consider any of the above options to be impractical or unworkable in some way? If so, why?

Compliance costs – Option 2, *Increase training and access to EPA assistance by establishing an LBL Technical Unit* as this will increase costs to fund an additional bureaucracy to provide a service that should be provided by the EPA regional officer.

Load reduction agreements – Option 2, *Raise the profile of LRAs* will not achieve a positive outcome in the absence of remedying the flaws in the system.

Use of revenue – Option 3, *Fund an LBL Technical Unit within EPA* is impractical and unworkable as this unit is unnecessary.

The revenue from the LBL scheme should not be used to fund a larger bureaucracy than already exists. Revenue should only be used to fund specific projects that provide improved environmental outcomes.

Other issues

There is a perception that the EPA applies a double standard to environmental discharges, with Sydney Water permitted to discharge primary screened sewage to the ocean whereas regional utilities are required to treat to a much higher standard.

3.5 CHAPTER 4.5 – GOVERNANCE AND ADMINISTRATION ISSUES

Topic focus question – Compliance assurance

1. What would be the most effective way(s) for the EPA to help licensees improve the accuracy and reliability of their reporting under LBL?

The most effective way(s) for the EPA to help licensees improve the accuracy and reliability of their reporting under LBL is to:

- Provide clear, simple guidance documentation;
- Provide annual training sessions for licensees; and
- Ensure EPA regional officers are able to provide answers to queries about LBL calculation and reporting obligations that are consistent between officers, offices, regions and head office.

Section focus questions

1. Do you consider any of the options described above for improving compliance assurance, administrative flexibility and the Technical Review Panel to be preferable? If so why?

Compliance assurance – Option 2, *Establish an ongoing program of focused LBL compliance audits* is preferable as it would ensure compliance without adding an additional cost and administrative burden on the licensee.

Administrative flexibility – the Water Directorate does not consider the only option provided, *Simplify the amendment of technical components of the LBL scheme by placing some outside the Regulation*, to be an improvement for the reasons identified by EPA on p 86 of *Review of the Load-based Licensing Scheme: Issues paper*. Licensee would have no certainty over their cost structure and would have limited avenues of appeal.

Technical Review Panel – Options 2 and 3, *Simplify and improve support for the TRP* and *Strengthen links and processes connecting the TRP with EPA operations* are preferable to ensure that EPA is receiving independent technical advice from a pool of people with specialist skills and expertise.

2. Do you consider any of the above options to be impractical or unworkable in some way? If so, why?

Compliance assurance – NSW Water Directorate considers either of the options to be practical and workable.

Administrative flexibility – NSW Water Directorate considers the only option presented, *Simplify the amendment of technical components of the LBL scheme by placing some outside the Regulation*, to be

impractical and unworkable as the safeguards, review and appeal mechanisms for industry have not been detailed.

Technical Review Panel – Option 4, *Abolish the TRP* would leave the EPA without independent technical advice from a pool of people with specialist skills and expertise.

3.6 CHAPTER 4.6 – IMPROVING THE LOAD CALCULATION PROTOCOL

Topic focus question

1. How could the LCP be improved to reduce complexity?

The LCP could be improved by adding a list of acronyms.

2. How could the LCP be improved to make it more current (up-to-date)?

The LCP could be improved to make it more current (up-to-date) by rewriting Section 5.1 *Effluent reuse* to match current practices by both EPA regional officers and licensees.

4 RECOMMENDATIONS

The Water Directorate welcomes the opportunity to make a submission on EPA’s Review of the load-based licensing scheme, and makes the following recommendations:

No.	Recommendation	Issues paper reference
1	Coordinate the LBL scheme with other water industry regulations to achieve a whole of government approach to water industry regulation.	Ch 3.1
2	Coordinate the LBL scheme with DPI Water’s Best Practice Management framework in order to effect sustainable changes to the operation of sewage treatment plants.	Ch 3.1 Ch 4.2 Ch 4.3
3	Extend the role of LBL in the water industry to: <ul style="list-style-type: none"> encourage best practice by local water utilities reduce the total pollution load at the lowest net cost, which may be achieved through actions such as catchment management offsets provide an alternative to the use of fines and other regulatory action when licence conditions are not met 	Ch 3.1
4	Remove load limits from scheduled activities whose scale of operation is weather dependent, including sewage treatment plants.	Ch 4.2
5	Assessable pollutants – Option 2, <i>focus on the highest priority pollutants</i> Critical zones – Option 2, <i>further developing and expanding on the principles of the ‘critical zone’ approach, rather than creating critical zones over some discreet areas, assign area-specific pollutant weightings across the state</i> Scheduled activities – Option 5, <i>pursue a combination of Options 2 and 3</i> Load limits – Option 2, <i>abolish load limits</i>	Ch 4.2
6	Reconsider the need for reporting of pollutants loads for which there is no weighting and no fee.	Ch 4.2 CH 4.4
7	Promote effluent reuse by removing impediments and providing grants.	Ch 4.3
8	Establish LBL revenue recycling, with fees collected through the LBL scheme set aside for a grant scheme to reduce pollutant loads.	Ch 4.3 Ch 4.4

9	<p>Pollutant fee unit – Option 1, <i>maintain the status quo – a standard increase in the PFU to account for CPI</i></p> <p>Critical zone weightings – Option 1, <i>maintain the status quo – assign critical zone weightings for target pollutants to reflect the relative priorities for reducing each pollutant in those areas</i></p> <p>Fee rate thresholds – Option 1, <i>remove fee rate thresholds</i></p> <p>Weighted loads – Option 1, <i>develop a green offsets policy to complement the LBL scheme</i></p>	Ch 4.3
10	<p>Create an online LBL portal for calculating and reporting loads, coordinated with the reporting requirements for:</p> <ul style="list-style-type: none"> • EPA Annual Return • EPA Annual Systems Performance Report • NPI Report • DPI Water Performance Monitoring Report • National Performance Report • Notification of pollution incidents to all relevant authorities • All other government reporting of similar information 	Ch 4.4
11	Remove the requirement for LBL fees to be paid for pollutant concentrations that do not exceed licensed concentration limits.	Ch 4.4
12	EPA work cooperatively with local water utilities to encourage the use of LRAs.	Ch 4.4
13	<p>Compliance costs – Option 1, <i>Modernise the LBL calculation and reporting process</i></p> <p>Load reduction agreements – Option 1, <i>Increase the flexibility of load reduction agreements</i></p> <p>Use of revenue – Option 1, <i>Establish a grants program for emission reduction initiatives at LBL premises</i></p>	Ch 4.4
14	<p>Improve the accuracy and reliability of LBL reporting by:</p> <ul style="list-style-type: none"> • Providing clear, simple guidance documentation • Providing annual training sessions for licensees • Ensuring EPA regional officers are able to provide answers to queries about LBL calculation and reporting obligations that are consistent between officers, offices, regions and head office 	Ch 4.5
15	<p>Compliance assurance – Option 2, <i>Establish an ongoing program of focused LBL compliance audits</i></p> <p>Technical Review Panel – Options 2 and 3, <i>Simplify and improve support for the TRP and Strengthen links and processes connecting the TRP with EPA operations</i></p>	Ch 4.5
16	Improve the LCP by rewriting Section 5.1 <i>Effluent reuse</i> to match current industry practice.	Ch 4.6

The implementation of these recommendations will improve the regulation of scheduled activities, and in particular, improve environmental outcomes while reducing the regulatory burden of load-based licensing on sewage treatment plants.

5 REFERENCES

DPI Water (2014), *NSW Reference Rates Manual - Valuation of water supply, sewerage and stormwater assets*, Department of Primary Industries, Sydney.