7th February 2014

POEO (HRSTS) Regulation Review
Reform and Compliance Branch
Environment Protection Authority
PO Box A290
Sydney South NSW 1232

By email: HRSTS.Review@epa.nsw.gov.au

Dear Sir/Madam,

Review of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002

As an independent community legal centre specialising in public interest environmental law, EDO NSW welcomes the opportunity to comment on the review of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002. This submission has been prepared with input from the EDO NSW scientific expert register.

We note that the objectives of the review are to:

1. review the Regulation and the components of the Scheme set out in the Regulation
2. examine the effectiveness of the Scheme in managing the impact of saline water discharges in the Hunter River catchment
3. examine the efficiency, equity and ease of use of the Scheme for its participants and for the EPA\(^1\).

We also note that the review is starting "with the premise that the Scheme (as established by the Regulation) is the overall preferred mechanism for controlling saline water discharges in the Hunter River catchment and the focus will be on how the Regulation can be improved"\(^2\). As such, we have limited our comments to aspects of the review that relate to improving environmental outcomes from the Hunter River Salinity Trading Scheme (Scheme). We provide these comments in response to four of the focus questions outlined in the Review of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 - Discussion paper (Discussion Paper).

---

\(^1\) EPA (2013) Review of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 - Discussion paper, pg 1

\(^2\) Ibid.
Focus question 1: Is the Scheme (including salinity targets) working to manage the impacts of saline water discharges on aquatic ecosystems in the Hunter River catchment? What improvements could be made to the Regulation?

EDO NSW welcomes the work done by the EPA to understand the impact of the Scheme on the Hunter River as described in the Hunter River Catchment Assessment (Catchment Assessment). We note that one of the study conclusions was that “The available data suggests that throughout the catchment macroinvertebrate ‘health’ is on average good, but there are some areas where this is quite poor.” These results highlight the fact that different species and different sectors of the environment will respond to environmental changes in different ways. For the Scheme to be successful in protecting aquatic ecosystems, it is necessary to understand the aquatic ecosystems being impacted and the level of salinity they can tolerate. This information should inform the levels of discharge permitted under the Scheme.

EDO NSW strongly supports the Catchment Assessment recommendation that “Experimental studies are recommended in order to fully understand the environmental effects of the different components of saline water discharged to the Hunter River catchment (for example, ionic composition, metals/metalloid contamination, etc.)”. The Discussion Paper rightly notes that “Recent research suggests that the different ions that make up salinity can have varying degrees of toxicity (for example, high levels of bicarbonate ions have recently been shown to be a problem)”. Given that the Scheme regulates the release of saline water containing ions of varying toxicity, the Scheme is appropriately responsible for considering the full impacts of those releases.

Such a requirement is reinforced by recent recognition of the fact that companies that are discharging into waters are only authorised to pollute to the extent specified by their environmental protection licence (EPL). On behalf of the Blue Mountains Conservation Society, EDO NSW ran civil enforcement proceedings in the NSW Land and Environment Court against Delta Electricity under the Protection of the Environment Operations Act 1997 (POEO Act), for water pollution into the Coxs River which is part of Sydney’s drinking water supply. The litigation ran for over two and a half years, and was finally settled out of Court by the parties in October 2011. Delta agreed that it would do the works necessary to stop the pollution, and that in the interim, it would apply for limits to be set on those pollutants. The admission from Delta is important in this case because it is an acknowledgment that unless there is express authorisation under an environment protection licence to discharge pollutants, any such discharge is unlawful, even where the company is required to monitor the discharge of those pollutants.

The implication of this case for the Scheme is that appropriate studies, funded by Scheme participants, should be undertaken on the composition of the salts being released, the effects of these salts on aquatic ecology and the information should be

---

used to develop discharge limits that will protect the health of aquatic ecosystems. This research would rely on the implementation of a comprehensive monitoring network. This monitoring network and the associated research should be commenced at the earliest opportunity to ensure that future reviews of the Scheme can better assess the discharge limits of the various components of saline water that should be allowed under the Scheme.

To this end, EDO NSW supports the suggestion that allowable uses of funds generated by the Scheme should be extended to include the research necessary to understand and better manage the environmental impacts of the Scheme. The cost of participating in the Scheme should reflect the costs of undertaking research to ensure the health of aquatic ecosystems and therefore the effectiveness of the Scheme.

The Discussion Paper also flags the issue of salt from the Goulburn River entering the Hunter River and interacting with the Scheme. EDO NSW supports the idea that salinity management, whether through the Scheme or another mechanism, should encompass the entire Hunter River catchment. This includes not only the Goulburn River but other tributaries of the Hunter River, all of which should be managed to protect aquatic ecosystems. Before a management regime could be extended to the entire catchment, research on the catchment’s ability to tolerate different concentrations of salt and other chemicals would be necessary. In line with the need for a holistic consideration of impacts, EDO NSW supports the suggestion of removing exemptions for discharges during flood flows and incorporating these discharges into the Scheme.

The Discussion Paper includes further consideration of “Other significant sources of salt within the Scheme area”. EDO NSW submits that there are numerous and potentially increasing sources of salt entering the Hunter River. Unless these issues are managed holistically the potential exists for unconstrained increases of salt into the Hunter River regardless of the operation of the Scheme. One example of this problem was raised in Hunter Environment Lobby Inc v Minister for Planning and Infrastructure and Ashton Coal Operations Pty Ltd where expert evidence highlighted that as a result of the construction of an open cut coal mine, the South East Open Cut project was going to increase the discharge of salt into the Glennies Creek and thereby into the Hunter River through changes in groundwater composition. This discharge would not be licenced under either the Scheme or an EPL but would contribute to increases in the baseload of salt in the River. This has implications not only for the health of the Hunter River but for the management of the Scheme, in that any increase in the baseload of saline water in the Hunter River reduces the ‘gap’ between baseload and the specified discharge limits, thereby reducing the opportunities for discharge.

The Discussion Paper flags requests from participants to increase opportunities for discharge of saline water and discusses a number of options for changes to the Scheme in the event that there are barriers to increasing discharges under the current system. Specifically the Discussion Paper mentions “options for increasing discharge opportunities under the current salinity targets could then be explored, such as:
• allowing some discharge under low flow conditions (e.g. allow discharge where the discharge water quality is the same or better than the ambient water quality)
• changing the definition of a 'high flow' event so an event is triggered at a lower flow
• removing restrictions during flood flows.  

It is crucial that before any of these options are considered a full understanding of the effect of increased discharges is developed.

Focus question 3: Is the Scheme operating efficiently and cost-effectively? What improvements could be made to the Regulation?

The cost effectiveness of the Scheme should be considered in the context of whether the full environmental costs of operating the Scheme are covered. The research needs identified above are a direct result of saline discharges by Scheme participants. As a result, the cost of the research necessary to ensure that these discharges are being managed appropriately should be included.

Focus question 4: Is the Scheme providing an ongoing incentive for Scheme participants to reduce the environmental impact of their saline water discharges? What improvements could be made to the Regulation?

While the salinity credit auction system potentially encourages companies producing saline water to develop mechanisms to reduce and reuse this water on site, the cost of the system does potentially create incentives to minimise amount of saline water captured on site, thereby reducing the need to obtain credits for the release of water. To ensure that the increasing cost of credits does not create perverse outcomes, all sources of saline water leaving a site (whether through controlled releases, leakage or changes to groundwater systems) should be accounted for in all operations generating such discharges.

EDO NSW does not support the suggestion that credits for the Scheme should be sold to participants in perpetuity. The creation of pollution should never become an ongoing right but should instead by managed to ensure that pollution is eliminated, or at least reduced to the greatest extent possible, and that polluters should compensate the community for the environmental harm caused by this pollution. EDO NSW supports the retention of the auction system on the basis that it does reflect a 'polluter pays' principle and that it generates income that can be used to fund the research necessary to ensure the Scheme's effectiveness.

In the interests of transparency, EDO NSW supports the suggestion that information on the pricing of credits should be made publicly available and that other information on Scheme participants and operations should be publicly available.

---

Focus question 5: Are there other improvements that could be made to the Regulation?

EDO NSW believes that EPA should only consider the suitability of the Scheme as a model for other trading schemes where adequate information is known about the receiving environment and its ability to tolerate the introduction of pollutants on a cumulative basis.

EDO NSW would welcome the opportunity to comment on any draft amendments to regulation arising from this consultation.

Yours sincerely,
EDO NSW

Rachel Walmsley
Policy & Law Reform Director