

EPA 2013–14 Compliance Plan Report

Strategic compliance activities

Major point sources of pollution

Issues	Full year target	What we did
Impacts on residents from lead in Port Pirie	Ensure ongoing compliance with the current conditions of licence, in particular the environment improvement plan (EIP)	<p>Air monitoring results for total particulates and lead were submitted by Nyrstar on time throughout the year, with results showing improved performance and compliance. This is indicative of better levels of control at the site.</p> <p>However, Nyrstar exceeded its compliance limit at one monitoring location in December 2013 and did not meet NATA accreditation with all the required standards for air sampling. These are contraventions of licence conditions by Nyrstar and the appropriate regulatory response is being considered.</p> <p>Nyrstar has demonstrated compliance with other conditions of licence during the year.</p>
	Complete the EPA assessment of the impact of Nyrstar's transformation proposals in terms of emissions' reduction capabilities	<p>In 2013–14 Nyrstar received final approval from the state government to undertake the site transformation (closure of current sinter plant and acid plant), and construction and operation of a new enclosed bath smelter and acid plant.</p> <p>Nyrstar has an environment management plan in place for the construction phase of this project and has also submitted an EIP, which details action to be taken during the project and milestones.</p>
Impacts on residents from dust	Achieve further improvements in air and noise emissions' performance by each major licensee in the LeFevre Peninsula	<p>Penrice</p> <p>At the beginning of 2013–14 Penrice ceased operating the soda ash making plant. This meant that the facility was only producing sodium bicarbonate and quicklime for much of the year. The quicklime was a new product and involved new processes.</p> <p>There were two separate dust incidents, giving rise to multiple complaints from the public. The first incident was within the initial two weeks of operating the new quicklime plant and involved errors during commission of new plant and equipment. The second incident involved poor manual handling of lime by Penrice employees causing dust and fumes which affected residents in Taperoo.</p>

Issues	Full year target	What we did
		<p>We issued an expiation for the second incident for causing environmental nuisance.</p> <p>Discharges of suspended solids and ammonia to the Port River markedly reduced in 2013–14 due to the closure of the soda ash plant.</p> <p>In April 2014 the business went into administration and it was announced at the end of June 2014 that the entire Osborne plant would be closed. An ongoing issue of site clean-up and remediation will be required into the future.</p> <p>Adelaide Brighton Cement (ABC)</p> <p>The current EPA approved EIP includes actions to address fugitive dust emissions and noise. The EIP was developed in collaboration with a Community Consultation Group. Actions to address dust undertaken to date include the installation of rapid close doors on buildings, the enclosure of loading and unloading facilities and the installation of an enclosed washing facility for B-double trucks. The company undertook major work on a stack fan to reduce noise off site.</p> <p>Following programmed maintenance, stack particulate emissions decreased in the final quarter of 2013–14.</p> <p>Ambient particulate emissions have reduced due to stockpiles being stored within new enclosed facilities and improvements in dust management onsite.</p> <p>A noise monitoring program was undertaken at a complainant’s property in response to repeated concerns. Results demonstrate that ABC is complying with noise criteria outlined in the <i>Environment Protection (Noise) Policy 2007</i>.</p> <p>Further monitoring will occur shortly to inform the next noise management measures to be implemented.</p>
	<p>Provide increased support to the Adelaide Brighton Cement community liaison group, by providing additional expert advice on air monitoring programs and outcomes</p>	<p>Increased support has been provided to the ABC Community Liaison Group in the form of an EPA air quality specialist and Department of Health and Ageing representative attending meetings to assist group members understand monitoring results.</p> <p>A subcommittee has been formed to investigate National Pollutant Inventory (NPI) data in 2014–15. Its role will be to investigate apparent increases in some reported analytes.</p>
	<p>Mining/extractive industries and residential interface</p>	<p>Linwood Quarry (Marino) and Penrice Angaston Quarry both have approved dust management plans</p>

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	<p>Ensure that each licensee for three quarry locations (Penrice, Marino/Hallett Cove, Golden Grove) fulfils with an EPA-approved air quality management plan and is compliant with legislation (including where appropriate, the NEPM for Ambient Air Quality), as well as the requirement to take all reasonable and practicable measures to mitigate against potential dust impacts arising from activities</p>	<p>(DMPs) in place which includes real-time dust monitoring technology.</p> <p>Detailed dust audits of five licensees in the Golden Grove Extractive Zone (GGEIZ) commenced in 2013–14 in collaboration with the Department for State Development. All air quality audits were finalised. Key sources of dust impacts were:</p> <ul style="list-style-type: none"> • fine sediment from dry internal haul roads becoming airborne with frequent traversing of heavy vehicles in the summer months • excessive speed of heavy vehicles traversing along internal haul and access roads further exacerbating the issue of airborne dust • excessive heights of raw feed and product stockpiles combined with high velocity winds directed toward residential areas • insufficient dust suppression techniques applied at all sites. <p>We are now working with other government departments, the local council, the facilities and the community to address these issues. Part of our response includes undertaking air quality monitoring and increased regulatory presence in the area. We are also reviewing and updating licence conditions to require the development of detailed dust management plans for each sites, and EIPs to address longer-term, high cost dust management options.</p> <p>Adelaide Hills extractive site water quality audits</p> <p>In response to concerns raised by the Mt Lofty Ranges Catchment Management Board, we initiated a review of surface water management and surface water quality monitoring of three licensed Adelaide Hills' extractive sites in February 2014. All sites are located within close proximity to residential developments. The purpose of the review was to address offsite water quality impacts on Adelaide metropolitan catchments, and to guide the implementation of our own water quality monitoring program trial.</p> <p>The trial is aimed at testing a new methodology for compliance officers to assess the performance of Licensees in meeting the requirements of both the current <i>Environment Protection (Water Quality) Policy 2003</i> and proposed changes to this policy.</p> <p>Water quality audits were undertaken in May 2014. The key finding of the audits indicate that the primary source of contamination of stormwater flows</p>

Issues	Full year target	What we did
		<p>is from frequent traversing of heavy vehicles on exposed wet haul roads and extractive areas mobilising sediment fines in the winter months. The capacity of stormwater retention and treatment facilities was insufficient to retain and/or treat the volume of contaminated stormwater flows being generated, resulting in frequent offsite discharges of wastewater with high levels of turbidity and suspended solids. It was also identified that the re-use of treated contaminated stormwater could be improved.</p> <p>We are now progressing changes to licence conditions for each sites. EIPs will be required to ensure stormwater treatment facilities at the site are upgraded, and reuse options are maximised. Monitoring requirements for the sites will also be reviewed and improvements will be implemented through these changes.</p>
Impacts on residents from odour	<ul style="list-style-type: none"> • Foundry odour compliance • The EPA will require any foundry operations that are not meeting Odour Unit criteria at residential interfaces to develop an EIP, setting out methods by which criteria will be met, for EPA approval by 2014 <p>The long-term objective will be for all foundry operations to meet Odour Unit criteria by 2016 and the EPA will, in 2013–14, ensure that EIPs set actions in place to meet this timeframe</p>	<p>The main focus for our activity in the 2013–14 year was to work with Bradken Foundry in Kilburn, to ensure an EIP is in place to address our odour expectations.</p> <p>The EIP, approved in August 2013, covers a range of site improvement activity designed to deliver both an interim odour reduction in early 2015, as well as meet the EPA odour compliance criteria of two Odour Units offsite by December 2015. As at 30 June 2014, implementation of the EIP actions is on track.</p> <p>We will continue to monitor all foundry activity in SA to assess compliance with odour requirements.</p>
Waste stockpiling	Undertake an audit program for key sites with the potential to stockpile significant volumes	<p>Fires at waste facilities have caused widespread environmental nuisance as a result of smoke, odour and fire water runoff. Past fires identified the need for us to work collaboratively with the Metropolitan Fire Service (MFS) to control fire risk.</p> <p>The stockpiling of waste carries an inherent risk of fires due to spontaneous combustion, chemical reactions and intentional acts. The resultant pollution from those fires can be widespread.</p> <p>We conducted stockpile audits at 11 facilities in the Wingfield precinct and while no serious non-compliance issues were found, issues such as stockpile dimensions, access to water for firefighting purposes and inappropriate disposal of material were identified at a number of sites</p>

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	Collate accurate stockpile data for key sites, identify risks to the environment and the regulatory environment and produce an action plan	<p>A series of recommendations have been made as a result of the stockpile audits, including:</p> <ul style="list-style-type: none"> • specifying stockpile dimensions as a condition of licence for combustible material stored outside • requiring, as a condition of licence, the development of stockpile management plans and emergency management plans relating to fires at the site (including maintaining access for emergency vehicles) <p>We are now working to implement those recommendations.</p>
Waste levy avoidance	Undertake 90 targeted site inspections to examine the nature of operations and audit the placement of waste at landfills	We completed all planned site inspections, which included both metropolitan and regional sites. The purpose of the inspections was to assess whether waste was being disposed of appropriately in the active landfill cells.
	<ul style="list-style-type: none"> • Complete 300 monthly weighbridge audits • Undertake 65 surveillance activities of high risk sites 	The purpose of these audits and surveillance activity was to identify any instances of incorrect weighbridge use and to assess if the correct waste levy was being collected. We undertook 300 audits and 56 separate surveillance activities and identified discrepancies in reporting of received waste.
	Complete 12 desktop audits to validate correct characterisation of wastes at landfills	The purpose of these audits was to identify any data entry issues relating to waste classification for waste levy reporting purposes. All planned desktop audits were completed and no data entry issues were identified.
Resource recovery and e-waste	Undertake audit of the five currently approved resource recovery facilities	<p>Since 1 September 2012, suitable waste produced in metropolitan Adelaide is required to be subject to resource recovery processes prior to being disposed of to landfill, under the <i>Environment Protection (Waste to Resources) Policy 2010</i> (EPP).</p> <p>Certain materials are also generally banned from disposal to landfill under the EPP.</p> <p>The five facilities that have been approved by the EPA to carry out resource recovery processes (under clause 11 of the EPP) were audited to determine the extent of compliance and management of the resource recovery processes.</p> <p>The audits have been completed and recommendations will be made following the review and assessment for each site, due for completion later this year.</p>

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	<p>Undertake audit of seven priority e-waste collection and drop-off sites</p>	<p>As a result of the roll-out of landfill bans for e-waste and the National Television and Computer Recycling Scheme, a large number of permanent e-waste drop-off sites have been established across South Australia. These sites comprise a mix of EPA-licensed waste depots and non-licensed limited drop-offs within electronic retail stores. A sample size of seven facilities were chosen to be audited to assess the extent of compliance and understand more clearly how management of e-waste is undertaken during collection.</p> <p>There was a common issue identified as lack of inappropriate storage of e-waste among the sites, as operators are unaware of the risks involved. In response, we are proposing to develop an e-waste handling and storage guideline for stakeholders.</p> <p>Licence conditions will be reviewed for all sites receiving cathode ray televisions (CRTs), to ensure that broken units are handled and disposed of appropriately.</p>
<p>Illegal management of waste and illegal dumping</p>	<p>The Illegal Dumping Unit (IDU) will use its intelligence holding and analysis to target and intervene in illegal waste management activities. Four key focus areas for 2013–14 are:</p> <ul style="list-style-type: none"> • companies or natural persons who engage in serial dumping • unlicensed waste and recycling operation • uncovered transport of waste • transport and disposal of contaminated /hazardous waste. 	<p>In 2013–14, potential illegal dumping sites were targeted using the latest imagery and high-tech equipment to monitor illegal dumping activity and sending a strong message that illegal dumping will not be tolerated.</p> <p>We also reviewed 115 complaints and enquiries in relation to illegal dumping and conducted a total of 42 investigations into illegal dumping activities. Our activity in this area has, to date, resulted in a number of warnings, two successful prosecutions (others pending) and a negotiated civil penalty.</p> <p>We conducted a targeted operation called Operation Playford (October 2013) with six sites identified and inspected for suspected illegal dumping/stockpiling of construction and demolition waste. Three Environment Protection Orders were issued to cease the receipt of waste.</p>
<p>Tracking of waste movements</p>	<p>Implement an online waste tracking system as an alternative to paper-based waste tracking</p>	<p>While delays have been experienced in the progress of WasteTracker, the project is proceeding well, with some significant gains being made this year.</p> <p>Determining codes for depots' receivable wastes and conversion of waste tracking licence conditions has proven to be more complicated than originally anticipated.</p> <p>Feedback from key stakeholders was encouraging and the proposal to provide them with a trial system was met with enthusiasm.</p>

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		Communication with stakeholders has also highlighted some issues requiring consideration, such as its implications on SA Water regulatory practices, integration with a major licensee's tracking system, and managing expectations of an industry sector wanting to use the new system for other purposes.

Protection of marine and inland waters

Issues	Full year target	What we did
Implementation of the Adelaide Coastal Water Quality Improvement Plan (ACWQIP)	Identify required improvement works and develop draft licence conditions to target nitrogen reduction in marine discharge from Glenelg and Bolivar wastewater treatment plants (WWTPs)	Both Glenelg and Bolivar WWTP licences will submit EIPs in July 2017. The EIPs will be developed using outputs of a bio-geochemical model for the Adelaide coastline for nutrient impacts on seagrass. These will include actions to assist in achieving nitrogen and suspended solid targets as outlined in the Adelaide Coastal Water Quality Improvement Plan.
Kimberly–Clark Australia	<ul style="list-style-type: none"> • Develop the EPA licence condition • Develop reasonable discharge limits in wastewater for the future. • Develop a water monitoring program for KCA to undertake 	The 50-year indenture for the Kimberly–Clark Australia Pulp and Paper Mill in Millicent ends in October 2014 and the company will be moved to an EPA licence. In preparation, a significant amount of time and effort have been spent working with the company to develop licence conditions, set discharge limits for wastewater, and develop a new groundwater monitoring program. The new licence will be issued in October 2014.
Fish processing wastewater discharge	Ensure that all land-based fish processors in the Port Lincoln region cease the discharge of wastewater to the marine environment	Environment Improvement Plans (EIPs) have been approved for two sites in Port Lincoln. The plans include actions to divert the majority of wastewater to sewer. Residual water from fish bins that is too saline for the sewer system will be managed separately. Investigations for alternate options to dispose of this water is continuing. Implementation of the EIPs will now be monitored.
Regional wastewater management	<ul style="list-style-type: none"> • Conduct an audit of onsite wastewater systems and existing community sewage treatment systems in coastal areas to identify and prioritise the need for upgrades based on environmental risk • Communicate the outcomes of the audit to local government to assist 	During the year, a review of current status at three priority locations demonstrated an audit was no longer the preferred approach to achieving system improvement. The local council at a key priority location, Port Neill, has taken steps to commence the upgrade of their wastewater system and has secured funds to do so in 2014–15.

Issues	Full year target	What we did
	them in their wastewater management planning	<p>In Cowell, a development application has been lodged for a full sewer and wastewater treatment system.</p> <p>At the remaining location Arno Bay, the EPA will work with the local council to identify options for improved management of wastewater.</p>

Expansion of mining in South Australia and its associated infrastructure

Issues	Full year target	What we did
	To provide effective environmental oversight of existing EPA licensed mining and extractive industries, and to effectively mitigate for the environmental risk from developing mines, through compliance with licence conditions and environment protection policies.	We aimed to undertake site inspections of EPA licensed mining and extractives Industries, review licence conditions in accordance with inspection findings and liaise with the Department of State Development (DSD) on findings and proposed approach.
	Ensure effective closure criteria and plans for the Terramin and White Dam mines to ensure compliance with EPA requirements and in consultation with DSD.	<p>Terramin</p> <p>The mine site is currently inactive and will likely remain inactive for some time. We assessed a draft closure plan developed by Terramin and provided feedback in December 2013.</p> <p>The DSD is leading negotiations with Terramin on interim monitoring and management of the site, and finalising the mine site closure plan. We will continue to assist DSD with regard to environmental issues in the meantime and during mine closure, particularly with regard to site contamination and water quality.</p> <p>White Dam</p> <p>We provided advice to DSD regarding water quality assessment criteria prior to commencement of the final mine closure work.</p> <p>The DSD is leading negotiations with White Dam in finalising the mine site closure plan. We will continue to assist DSD with regard to environmental issues in the interim and during mine closure, particularly with regard to site contamination and water quality.</p>

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	<p>To provide advice, assessment and expected environmental management controls for activities of environmental significance for mining related infrastructure, which are expected to be Lucky Bay wharf facility, Port Spencer port facility and Cape Hardy port facility for 2013–14</p>	<p>We finalised our environmental assessment of the Lucky Bay Common User Export Facility and provided relevant advice to the Minister for Planning. Our advice has been incorporated into the Development Approval, which was granted in November 2013.</p> <p>We were invited to assess and provide comment on an environmental impact statement (EIS) for the Spencer Gulf Port Link and Port Bonython Bulk Commodities Export Facility. Detailed comments were provided to the Department for Planning Transport and Infrastructure (DPTI) in November 2013.</p>

Operational compliance activities

Licensed sites

Issues	Full year target	What we did
Inspections	Undertake 720 inspections of licensed premises and inspect all higher-risk sites at least once during the year	A total of 937 inspections were carried out for 2013–14. These include planned inspections as well as those carried out in response to information, complaints or as part of a regional visit.
	Establish a database system that will enable tracking of the overall status of licensee compliance and report in the next compliance plan	<p>A method of tracking licensee compliance levels will be included in the new licensing database (LAMP) that will go live in 2014.</p> <p>Compliance officers received training on this aspect as part of the new database training program in early 2014.</p> <p>Once the system is live, tracking the compliance of licensees can occur. This will ensure that the EPA can assign resources in an effective manner and ensures ongoing environmental improvement outcomes. This system could be developed into a more advanced non-binary system in the future.</p>
Sector audit programs	Conduct a desktop audit of curing and drying facilities in SA, to identify those that require authorisation in the form of a licence	<p>From a list of operators of food production involved with curing and drying, 91 operators were identified as potentially processing over the 250-kg/hr threshold. These operators were asked to complete a survey to gather information on their processing activity and volumes.</p> <p>As a result, only one operator was clearly identified as clearly needing to be licensed by the EPA.</p> <p>A further two facilities had the potential to be licensed and site visits will be conducted to confirm operating capacity.</p>
Noise from early morning waste collections	Complete and report on a trial to better link the public with waste transporters and produce an action plan	<p>The EPA receives an average of 75 reports on early morning waste collection noise every year. During 2013–14 we implemented a policy of redirecting residents to the relevant waste transport service provider (WTSP) with the required information to seek resolution of their issue. We only became actively involved when the issue remained unresolved despite the efforts of the residents and the WTSP.</p> <p>Data collected during the trial indicated 83% of residents had contacted the WTSP and 60% of issues were resolved without our further involvement. Through the feedback provided by the residents, approximately 77% were happy/satisfied with the staged approach process. As the trial has</p>

Issues	Full year target	What we did
		shown to be a success in resolving residents' issues more effectively, further review and implementation of the policy is being considered.

Container deposit legislation

Issues	Full year target	What we did
	Targeting of non-approved beverage containers at retail premises	<p>Compliance activities associated with CDL continued to detect significant numbers of containers of non-approved beverage containers. These breaches are often associated with small retailers. In 2013–14, approximately 75,000 non-approved beverage containers were removed from sale.</p> <p>We conducted 'Operation Prospect' focusing on a number of small retailers on Prospect Road. These stores have a history of non-compliance. A total of seven expiations were issued to these stores for selling non-approved beverage containers.</p>
	Improve effectiveness of EPA response to reports of interstate rorting	<p>We remain concerned that beverage containers sold interstate, where the CDL component is not paid, are being brought into SA in order to claim the refund. This activity has the potential to fundamentally undermine the CDL system by distorting the economic model on which it is based.</p> <p>We continued to receive reports of this type of activity, but the allegations have been difficult to prove. A program of surveillance is planned for 2014–15.</p>

Plastic bag legislation

Issues	Full year target	What we did
	<p>Targeting lightweight plastic shopping bags at retail premises, including major community events (eg Royal Adelaide Show and regional field days).</p> <p>Targeting lightweight plastic shopping bags that claim to meet biodegradability criteria of AS 4736–2006.</p>	<p>Intelligence suggests that most breaches of the plastic bag legislation occur at events such as the Royal Adelaide Show and field days in regional areas. Non-compliance is typically associated with interstate traders who are not subject to similar legislation in their own state.</p> <p>The main focus for plastic shopping bag legislation occurred at the Royal Adelaide Show where a total of nine written warnings were issued to traders (compared to 23 in 2012–13). We continue to liaise extensively with organisers to ensure all exhibitors are aware of their legislative requirements.</p>

Local environmental nuisance

Issues	Full year target	What we did
	Improved resolution of issues that have been prioritised in accordance with the EPA's complaints management system	<p>The staged administrative system utilised by us to respond to complaints associated with non-licensed activities continues to resolve approximately 95% of all complaints without the need for formal compliance intervention.</p> <p>Of an estimated 1,500 non-licensed complaints received, approximately 40 progress to formal investigation phase.</p>

Regulatory programs

Issues	Full year target	What we did
National Pollutant Inventory (NPI) database of emissions to air, land and water	All reports submitted to EPA are validated prior to publication by the Commonwealth on the NPI website by 31 March 2014	We reviewed and validated 100% of NPI reports received prior to publication on schedule.
	NPI audits of five facilities targeting those with identified risks of environmental impacts based on variations in emissions or other issues identified during validation	All NPI reports submitted to the EPA undergo a robust desktop validation process to ensure data integrity prior to submission to the Australian Government for publication. Desktop audits are underpinned by site audits that perform an in-depth assessment of the integrity of reported emission and transfer data, including the calculation tools and methodology. Site visits and audits for all nominated facilities were undertaken, with three facilities audit documentation completed. Documentation of the remaining two facilities' documentation were finalised in September 2014.
	Ensure at least one (1) in-house training event is held for metro and regional reporters to assist with the preparation and submission of NPI Reports	Training for NPI reporters on the use of the online NPI reporting system occurred over 26-30 August in EPA headquarters. During this week "drop in" sessions were also provided for reporters to assist them with completing their reports. Ad-hoc training sessions were also facilitated throughout the year to assist reporters with managing their reporting responsibilities.
Expansion in radiation technology	Complete audits of radiation equipment tested by third parties to ensure standards are being maintained	<p>In response to quality and data integrity concerns, we focused our audit activity on one particular third party tester. This involved the detailed testing of 10 pieces of equipment, encompassing 30 individual test reports. We cross-checked results with reports received from the third party tester and identified discrepancies in data validation.</p> <p>We are now working with the tester to improve performance and considering what action we may</p>

Issues	Full year target	What we did
		take in relation to this matter. At no point was the health and safety of radiation workers or members of the public at risk.
Radioactive source and radioactive waste management	Complete an audit of key sites with radioactive material and waste to confirm safe secure storage and compliance with EPA requirements	We conducted an audit of four metropolitan facilities, including hospitals and universities. Results of these audits confirmed that radioactive material and waste are being safely stored in accordance with our requirements.
Radiation Protection and Control (Ionising Radiations) Regulations	Complete a review of the Regulations in 2013–14	<p>We undertook an initial review of the <i>Radiation Protection and Control (Ionising Radiation) Regulations 2000</i> and are now working towards providing Parliamentary Counsel with drafting instructions for a revised set of Regulations.</p> <p>Several codes of practice for radiation equipment were also finalised, and will be referenced in the new regulations.</p> <p>We also undertook public consultation on the <i>Radiation Protection and Control Bill 2013</i>. The initial review was completed with recommendations for changes and drafting instructions in August 2014.</p>