Office of Environment & Heritage

FINAL

COMPLIANCE AUDIT REPORT

QENOS PTY LTD
LOT 5 AND LOT 10 OF BOTANY INDUSTRIAL PARK
16-20 BEAUCHAMP ROAD
MATRAVILLE NSW 2036

NOVEMBER 2011

This report has been prepared to present the findings of the audit carried out and no responsibility is accepted for its use in any other context, or for any other purpose.

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EXECUTIVE SUMMARY

An Environment Protection Authority (EPA), Department of Premier and Cabinet Compliance Audit was undertaken at the Qenos Pty Ltd plastic manufacturing facility located at Matraville. The site was audited as part of a state-wide program of audits focusing on the management of major environmental risks associated with the activities undertaken at the site. The audit also focussed on emergency management procedures to be used by the licensee in the event of an incident occurring that is or is likely to impact on the environment or on the local community. The main objectives of the audit were to assess compliance with the requirements of Environment Protection Licence 10000 relating to the management of major environmental risks and emergency management planning, and to recommend an action program to be implemented by the licensee to address any non-compliance identified during the audit.

Assessment of compliance was undertaken using information collected during a detailed audit inspection, information supplied by the enterprise, and a review of records and documentation relating to the premises. The procedures and protocols for conducting compliance audits are detailed in the EPA *Compliance Audit Handbook*. The audit inspection was carried out by officers of the EPA on 21 and 22 September 2011.

The findings of the audit indicate that the enterprise was not complying with some conditions attached to Environment Protection Licence 10000 issued under the Protection of the Environment Operations Act 1997.

The non-compliances related to:

- Updating the Emergency Response Plan.
- Advertising the telephone complaints line to the public

The following issues of concern were identified through further observations:

- Environmental risk posed by overhead pipelines transporting liquid chemicals (Site Utilities)
- Monitoring the effectiveness of controls associated with the Effluent treatment system and stormwater pits (Olefines)
- Unmarked stormwater valves and drains which could result in surface water pollution in an emergency situation

A risk assessment of non-compliances is used to colour code non-compliances according to their environmental significance and an action program has been developed. The action program includes a timeframe for non-compliances to be addressed to ensure the licensee deals with issues raised through the audit process in a timely manner (Table 4.1).

While the risk assessment of non-compliances is used to prioritise actions to be taken, the EPA considers all non-compliances to be important and licensees must ensure that all non-

compliances are addressed by the due date specified in the Action Program.

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1.0 INTRODUCTION

An Environment Protection Authority (EPA), Department of Premier and Cabinet Compliance Audit has been undertaken at the Qenos Pty Ltd plastic manufacturing facility at Matraville. The site was audited as part of a state-wide program of audits focusing on the management of major environmental risks associated with the activities undertaken at the site. The audit also focussed on emergency management procedures employed by the licensee in the event of an incident occurring at the site that is or is likely to impact on the environment or on the local community. The audit inspection was undertaken on 21 and 22 September 2011.

The procedures and processes for conducting EPA Compliance Audits are detailed in the *Compliance Audit Handbook,* which can be accessed on the EPA website at http://www.environment.nsw.gov.au/resources/licensing/cahandbook0613.pdf.

1.1 Audit Objective

The objectives of the audit were

- to determine whether the enterprise is complying with environment protection licence requirements in relation to the audit scope and criteria; and
- to outline a time frame for follow-up action to address any non-compliances identified during the audit.

1.2 Scope of the Audit

The scope of the audit is limited to the examination of the activities undertaken at Qenos Pty Ltd, in relation to the management of major environmental risks.

The temporal scope adopted for assessment of compliance is:

- The days of the audit inspection for assessing compliance with Operating Conditions, relating to the management of major environmental risks and emergency management planning; and
- 12 months prior to the end of the audit inspection for assessing compliance with any Monitoring, Recording and Special Conditions and Pollution Studies and Reduction Programs relating to the audit scope.

1.3 Audit criteria, evidence and findings

Audit criteria (the requirements against which the auditor compares collected audit evidence) are the Conditions attached to Environment Protection Licence Number 10000 issued under the POEO Act to Qenos Pty Ltd, in relation to the management of major environmental risks.

Audit criteria may include any document referred to by the licence, or relevant to a particular condition of the licence.

Audit evidence was collected during discussions with site personnel, examination of documentation provided by the licensee and/or contained on EPA files, together with observations made during the audit inspection.

Findings of non-compliance with licence conditions are summarised in table 2.1. An Action Program provides a time frame for follow-up action necessary to comply with the licence condition concerned.

1.4 Premises and Process Description

Qenos Pty Ltd operates a plastic manufacturing facility at Matraville. The facility is located in the Botany Industrial Park complex, within the Council of the City of Botany Bay local government area. The premises are surrounded by other industrial premises, with the nearest residences approximately 0.5 kms away. The nearest watercourse is a man-made stormwater channel, Springvale Drain, which runs through part of the premises. This stormwater channel drains to Penrhyn Estuary and Botany Bay.

The licensee uses ethane which is piped from South Australia to make ethylene, which is the basis of many products made on the site. The ethylene is produced at the Olefines Plant and is used in two downstream polyethylene plants (Alkatuff and Alkathene) to produce low density polythene, linear low density and high density polythenes. These plastics have a range of applications from food and beverage packaging to more heavy duty applications. Additional ethylene is on sold to domestic and export customers.

A fourth plant (Site Utilities) provides steam for the other plants through use of its three boilers (two coal-fired and one gas-fired), as well as other utilities (including cooling water and effluent treatment) for other occupiers of the Botany Industrial Park complex.

The facility stores a range of liquid chemicals and gases which are either brought to the site by pipeline, or by tanker, or are manufactured onsite. These include: hydrocarbon products such as pyrolysis gasoline, naphtha, diesel, hexane/hexene, and Isopar-L (isoparaffinic fluid); a range of alkalines, acids and catalysts; and liquefied gases including propylene, propane, butane, nitrogen and oxygen.

1.5 Statutory Instruments Issued to the Enterprise

The EPA has issued the following statutory instruments to the enterprise:

Licence number 10000 issued under the Protection of the Environment Operations Act 1997.

The scheduled activity undertaken at the premises is *Chemical production* with a fee scale category of *Petrochemical production – Sydney Basin* > 200000 - T produced and *Plastics resins production – Sydney Basin* > 10000 - T produced and reprocessed.

The anniversary date for the licence is 15 October.

A copy of Licence 10000 can be accessed through the EPA online public register at: http://www.environment.nsw.gov.au/prpoeoapp/searchregister.aspx

1.6 Risk Assessment of Non-compliances

The significance of any non-compliances identified during the audit process are categorised. Following risk assessment of non-compliances, an escalating response relative to the seriousness of the non-compliance is determined to ensure the non-compliance is addressed by the enterprise.

The risk assessment of non-compliances involves assessment of the non-compliance against two criteria; the likelihood of environmental harm occurring and the level of environmental impact as a result of the non-compliance. After these assessments have been made, information is transferred into the risk analysis matrix below.

		Likelihood of Environmental Harm Occurring		
Level of Environmental Impact		Certain	Likely	Less Likely
	High	Code Red	Code Red	Code Orange
	Moderate	Code Red	Code Orange	Code Yellow
	Low	Code Orange	Code Yellow	Code Yellow

The assessment of the likelihood of environmental harm occurring and the level of environmental impact allows for the risk assessment of the non-compliance via a colour coding system. A red risk assessment for non-compliance denotes that the non-compliance is of considerable environmental significance and therefore must be dealt with as a matter of priority. An orange risk assessment for non-compliance is still a significant risk of harm to the environment however can be given a lower priority than a red risk assessment. A yellow risk assessment for non-compliance indicates that the non-compliance could receive a lower priority but must be addressed.

There are also a number of licence conditions that do not have a direct environmental significance, but are still important to the integrity of the regulatory system. These conditions relate to administrative, monitoring and reporting requirements. Non-compliance of these conditions is given a blue colour code.

The colour code is used as the basis for deciding on the priority of remedial action required by the licensee and the timeframe within which the non-compliance needs to be addressed. This information is presented in the action program alongside the target/action date for the non-compliance to be addressed.

While the risk assessment of non-compliances is used to prioritise actions to be taken, the EPA considers all non-compliances are important and licensees must ensure that all non-compliances are addressed as soon as possible.

2.0 ASSESSMENT OF COMPLIANCE

2.1 Compliance with Audit Criteria

Compliance was assessed against the licensing requirements of the POEO Act, and the requirements of Environment Protection Licence Number 10000 relating to the audit scope and criteria.

Assessment of compliance was undertaken by a detailed site inspection and review of all records and documentation relating to the audit scope and criteria as required by the licence issued to the licensee.

The findings of the audit indicate that some of the conditions of the environment protection licence, relating to the audit scope were not being complied with.

Details of assessment are presented in Table 2.1.

Table 2.1 Assessment of Compliance with Environment Protection Licence No. 10000

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
O	**Operating Conditions** *The audit assessment is based upon evidence relating to the period limited to on the day of the audit inspection.*		
O1.1 Licensed activities must be carried out in a competent manner	**Managing major environmental risks associated with surface water and groundwater pollution**		
	Yes	**Identification of Major Environmental Risks** The licensee has identified major environmental risks associated with the pollution of surface water (storm water). These include: • Leaks and spills on the premises associated with: o the operation of chemical storage areas, o the handling and movement of chemicals on site including process areas, o the conveyance of contaminated water on the premises by pipe line including cooling water, quench water, flare seal waste water and effluent, and o the storage and transport within the premises of hazardous wastes • Loss of containment of contaminated fire water The auditors identified another environmental risk during the audit inspection which was not identified by the licensee. This risk is loss of containment from overhead pipelines near the Site Utilities effluent plant conveying polluted water and other liquids. The significance of this risk has not been assessed so it is unknown whether this is a major environmental risk. Please refer to *Further Observations*.	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		Use of controls to minimise the Major Environmental Risks Identified The licensee has controls in place to manage the major environmental risks identified such as: • Provision of containment for chemicals stored and handled at the site to prevent pollution of water due to leaks and spills. • High pressure pipelines have cathodic protection to help prevent deterioration due to corrosion. • Treatment of contaminated water prior to discharge to sewer. • An operator and driver are present during loading/transfer events. • Tanker unloading areas are provided with sumps to collect spills. • Provision of spill kits at key locations to enable spilled material to be collected. • Overfill prevention devices to help prevent spillage of material. • Regular inspections of plant and equipment to identify any deterioration and repair and replace as necessary. • Training of staff in the use and management of controls and their roles in emergency response. • Documented operating procedures are in place to help prevent spills and leaks and communication of these to all relevant staff and contractors. • Provision for containment of firewater on site.	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		Monitoring the effectiveness of the controls used by the licensee to manage the Major Environmental Risks The licensee monitors the effectiveness of the controls used to manage the major environmental risks identified at the site. Monitoring undertaken by the licensee includes the use of: • Testing and calibration of instruments and equipment based on probability of failure and safety integrity levels. • Monitoring performance of control devices and alarms. • Drills and simulations to help ensure that site staff respond as required to emergency situations. Records are kept of these exercises and there is a process in place for reporting the outcomes and any lessons learnt. • Pipeline flow rate/pressure monitored to detect loss of containment during transfers.	
	Managing major environmental risks associated with soil and ground water pollution		
	Yes	**Identification of Major Environmental Risks** The licensee has identified major environmental risks associated with the pollution of soil and/or ground water. These include: • Leaks and spills on the premises associated with; o the operation of chemical storage areas including underground storage tanks (diesel and Isopar-L), o the handling and movement of chemicals and other materials on site (e.g. coal and ash) including from process areas, o the conveyance of contaminated water on the premises including cooling water, quench water, flare seal waste water and effluent, and	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		o the storage and transport within the premises of hazardous wastes • Loss of containment of contaminated fire water The auditors did not identify any other major environmental risks during the audit inspection.	
		Use of controls to minimise the Major Environmental Risks Identified Most of the controls in place to manage the major environmental risks associated with surface water pollution also assist in the management of soil and ground water pollution. The licensee uses additional controls to manage the major environmental risks associated with soil and groundwater pollution such as:. • Diesel tanks have early warning devices and interstitial monitoring. • Quality control to help ensure that the Isopar-L delivered to the site is suitable for storage in the underground storage tanks provided. • A scheduled maintenance program for underground tanks. • Mass balance checks are conducted on underground tanks every month and there are continual level indicators on most tanks.	
		Monitoring the effectiveness of the controls used by the licensee to manage the Major Environmental Risks In addition to the monitoring undertaken by the licensee to monitor the effectiveness of the controls used to manage the major environmental risks associated with surface water pollution, the licensee undertakes additional monitoring to assess the effectiveness of the controls used to manage soil and ground water pollution. Additional monitoring undertaken by the licensee includes: • Pipelines inspected and pressure tested to ensure integrity and prevent leaks. • Periodic testing of the Isopar-L to ensure that it meets specifications.	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		<u>Monitoring the effectiveness of controls associated with the Effluent treatment system and stormwater pits (Olefines)</u> The licensee has identified the risk of soil and ground water pollution from the effluent treatment system and the stormwater pits at the Olefines Plant and has controls in place to manage the risk. However, the licensee is not monitoring the effectiveness of the controls to determine if they are effective in managing the risk. Please refer to *Further Observations.*	
	Managing major environmental risks associated with air pollution		
	Yes	**Identification of Major Environmental Risks** The licensee has identified major environmental risks associated with air pollution. These include: • the loss of containment of gases from: gas storage areas, process areas during normal operation and during start-ups and shut-downs, and from tanker loading areas, with the potential for fire and explosion • the incomplete combustion of flared gases, and • the loss of containment of particulates from the boiler house.	
		Use of controls to minimise the Major Environmental Risks The licensee uses controls to manage the major environmental risks such as: • Leak and gas detectors around gas storage and process areas. • Operating procedures including critical procedures for maintenance activities and during furnace swings in/out. • Before starting up or shutting down, all equipment is brought to a fail-safe position. • During a shutdown, the feedstock will be reduced.	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		• Pressure relief valves to prevent a build up of excess pressure. • Use of a flare system to burn excess gases safely and smokelessly. • Preventative maintenance including a leak detection and repair program for pipe work and valves. • Electrical safety devices (e.g. Scully earthing system) – to minimise risk of explosion and fire during loading and unloading of gases and flammable substances. • An operator and driver are always present during loading and unloading operations. • Emergency shut down/ stop buttons which can be activated remotely by operators as well as other manual override plant shutdown measures. • Deluges employed in case of fire. • A bag house filter system provided at the boiler house to prevent discharge of particulates. • Staff are trained in the use and management of controls and in emergency response procedures.	
		Monitoring the effectiveness of the controls used by the licensee to manage the Major Environmental Risks The licensee monitors the effectiveness of the controls used to manage the major environmental risks at the site. Monitoring undertaken by the licensee includes the use of: • Routine inspections/operator checks of controls and monitoring equipment. • Testing and calibration of control and monitoring instruments and equipment.. • Monitoring performance of control devices and alarms. • Drills and simulated emergency situations to help ensure that site staff respond as	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		required in case of an emergency. Records are kept of these exercises and there is a process in place for reporting the outcomes and any lessons learnt.	
	Managing Major Environmental Pollution Incidents		
	Yes	**Procedures, processes and equipment for managing major environmental pollution incidents** The licensee has procedures, processes and equipment in place to manage major environmental incidents. These include: • Procedures in place to be followed for major environmental pollution incidents and staff training in these procedures • Emergency response procedures for major risks identified that include emergency plant shut down (Team Leaders managing each shift are able to shut down parts of the plant without seeking approval). • A Safety Health and Environment Operating System has been prepared for the site which includes requirements for preventing pollution and being prepared and responding to pollution incidents. • Evacuation of personnel and notification to the licensee's senior management team. • Notification to relevant agencies including the EPA in the event of an environmental incident or emergency. • Assigning roles and responsibilities to key personnel including emergency commanders and a telephone liaison officer so that contact is made with the necessary onsite personnel and external parties. • Availability of emergency response equipment.	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
O3.1	Yes	**Emergency Response Plan** *Documentation systems and procedures within the Emergency Response Plan to deal with all types of incidents and keeping the Plan onsite*	
	No **Code Red**	*Maintaining the Emergency Response Plan* The licensee is not maintaining an up to date Emergency Response Plan for the premises. The licensee holds controlled copies of the Emergency Response Plan for each of the areas of Plant on the premises. These Emergency Response Plans are also available electronically on the licensee's Control Library, which every staff member has access to. During the audit inspection, a controlled hard copy of an Emergency Response Plan for the Olefines Plant was inspected and found to be different to the electronic copy which is held centrally on the licensee's Control Library. Further, some details in the electronic and hard copy controlled copies had not been updated for three years. It is understood that the licensee was in the process of updating and consolidating their Emergency Response Plans into one plan for the premises, involving a change in format but not content. The Emergency Response procedures were also overdue for a scheduled review. the is concerned that during this process of updating the plan that there is inconsistency in how the plan is used. Further, the EPA is concerned that the plan has not been maintained so that it is relevant to current operations.	The licensee must ensure that the Emergency Response Plan is maintained and that staff are made aware of which plan to use in case of an emergency.
M	**MONITORING CONDITIONS** *The audit assessment is based upon evidence relating to the period limited to 12 months prior to the end of the audit inspection.*		
M4.1, M4.2 & M4.4	Yes	**Recording of pollution complaints** The licensee keeps a legible record of all complaints received and these records contain all the details outlined in M4.2 a) to f). When asked to see these records, the licensee produced these to the auditor.	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
M4.3	It is beyond the scope of the audit to determine whether the licensee retains the records for at least 4 years. The licensee has records of complaints made in the past and the EPA has no reason to believe that those records would not be kept for the required 4 years.		
M5.1	Yes	**Operating a telephone line for receiving complaints** The licensee operates, during its operating hours a telephone line for the purpose of receiving any complaints from members of the public.	
M5.2	No **Code Blue**	**Advertising the telephone complaints line number to the public** The licensee does operate during its operating hours a telephone line and the number of this telephone line is advertised to the community. However, it was noted during the audit inspection from advertising material (a community brochure) provided by the licensee and the licensee's web site, that the telephone line is not advertised as a complaints line for the purpose of making a complaint. One number is advertised as a community hotline for the community to contact the licensee if they have 'any queries or comments, or [they] would like further information'. There is also a 24 hour number advertised in which to contact the BIP Emergency Response Service. OEH acknowledges that the licensee is a member of the Botany Industrial Park (BIP) and the BIP conduct regular meetings with a Community Consultative Committee and periodically distribute information brochures to local residents about BIP activities. It is also understood that the licensee has received complaints from the community through the Community Consultative Committee forum and through the telephone numbers which they advertise as a community hotline and a means to contact the Emergency Response Service. The EPA is concerned that as the telephone line numbers advertised to the community are not advertised as a means in which to contact the licensee with a complaint, that some members of the community may not know how to make a complaint to the licensee.	The licensee must inform members of the community that the advertised telephone line is a complaints line that can be used by members of the public for the purpose of making complaints.
M5.3	This is a deeming clause that determines the applicability of Conditions M5.1-M5.2 and no assessment of compliance is required. It is noted		

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
	that M5.1 and M5.2 do apply as the licence was been issued for more than 3 months.		
R	**REPORTING CONDITIONS** *The audit assessment is based upon evidence relating to the period limited to 12 months prior to the end of the audit inspection*		
R2.1	Yes	**Notification of environmental harm** There were three occasions during the audit scope where the licensee became aware of an incident causing or threatening material harm to the environment. On each of these occasions, the licensee notified the EPA by telephoning the Environment Line.	
R2.2	Yes	For each of the three incidents which occurred during the audit scope, the licensee provided written details (through a written report) of the notification to the EPA within 7 days of the date in which the incident occurred.	
U	**POLLUTION STUDIES AND REDUCTION PROGRAMS** *The audit assessment is based upon evidence relating to the period limited to the 12 months prior to the end of the audit inspection*		
U4	Yes	**PRP 7: Investigations of VOC Emissions Reductions Options – Alkathene Plant** **Condition U4.1** A report was submitted to the EPA by the specified date (31 December 2010) and it detailed all the required information as required by this condition.	
E	**SPECIAL CONDITIONS** *The audit assessment is based upon evidence relating to the period limited to the 12 months prior to the end of the audit inspection*		
E1 & E2	Yes	**Condition E1: Leak Detection and Repair Program (LDAR) and** **Condition E2: Leak Detection and Repair Program Methodology** **Conditions E1 and E2** The licensee has developed, implemented, operated, and maintained an LDAR program in accordance with the requirements of E2. The LDAR Program methodology was	

* See explanation of risk assessment of non-compliances codes on p3.

Statutory Instrument: Environment Protection Licence No. 10000			
Condition No.	**Compliance/ Risk assessment for non-compliance ***	**Comment**	**Action required by licensee**
		submitted to the EPA by 15 October 2010. The LDAR program included all the details required under this condition.	

* See explanation of risk assessment of non-compliances codes on p3.

3.0 FURTHER OBSERVATIONS

Further observations are recorded where the audit identified issues of environmental concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where environmental performance may be improved.

Further Observation No.1 – Environmental risk posed by overhead pipelines transporting liquid chemicals (Site Utilities)

The licensee has not identified all environmental risks from the premises associated with surface water pollution.

While the licensee has identified major environmental risks associated with surface water pollution, an additional risk was identified by the auditors during the audit inspection. The risk identified relates to leaks or spills from overhead pipelines near the effluent treatment plant that are used to transport liquid chemicals including 'polluted water' at the site. The significance of the risk has not been assessed, and therefore the appropriateness of the controls in place and the monitoring of these was not assessed.

It is noted that not all pipes in this area originate from the Qenos premises and some of the pipes are from other operations within the Botany Industrial Park. However, if there was a leak or spill from one of these pipes, there is the potential for waters to become polluted and require cleanup.

The licensee is encouraged to assess the environmental risk posed by these pipelines to surface water so that any necessary controls can be installed to reduce the risk. Confirmation with other parties within the Botany Industrial Park who are understood to own some of these pipes should also be sought to identify whether the risk has been considered by these parties and whether the risk is being managed appropriately.

Further Observation No.2 – Monitoring the effectiveness of controls associated with the Effluent treatment system and stormwater pits (Olefines)

The licensee has identified a risk of soil and ground water pollution from the effluent treatment system and the stormwater pits at the Olefines Plant and has controls in place to manage the risk. However, the licensee is not monitoring the effectiveness of the controls used to minimise the risk.

Effluent and stormwater from the Olefines Plant is stored and treated in concrete pits before it is discharged to sewer. The water may contain hydrocarbons and other pollutants. The integrity of the storage tanks is assessed through external inspections every 10 years. Samples from ground water monitoring bores upstream and downstream of the tanks are also taken on a yearly basis, with the latest sample tested in December 2009. It is understood that no sampling has been undertaken since 2009 and the licensee has not looked at trends in monitoring results from the sampling bores to ascertain whether the tanks are posing an environmental impact.

The EPA is concerned that the licensee is not using the results of the sampling from the ground water monitoring to determine if there is seepage from the tanks and whether any additional controls are required to manage the risk posed by the tanks.

Further Observation No.3 – Unmarked stormwater valves and drains which could result in surface water pollution in an emergency situation

During the audit inspection, it was found that a stormwater valve for a drain near the Propylene gas and fuel oil loading bay was not marked to indicate if the valve was in the 'open' or 'closed' position. Further, this drain was not marked to indicate whether it drained to the onsite effluent treatment system or directly to stormwater (to Springvale Drain). The licensee provided confirmation that the valve was in the closed position during the audit inspection and there are procedures to check and record the position of the valve during each shift by the Loading Bay Operator.

The EPA is concerned that although there are procedures in place for the operation of the stormwater valves during normal day to day operations, that it may not be clear to emergency response personnel whether the valves are open or closed and contaminated water or chemicals could inadvertently enter stormwater during an emergency. As stormwater drains are also not marked, there is an increased risk of stormwater pollution during an emergency if site personnel and emergency personnel cannot readily identify how stormwater drains from the site.

It is noted that the licensee has advised the EPA that it has implemented an improvement program to identify similar valves across the Olefines Plant to the one at the Propylene gas and fuel oil loading bay, and determine the best way to clearly identify the status of a valve's operation.

4.0 ACTION PROGRAM

The following action program must be undertaken in relation to Qenos Pty Ltd.

Table 4.1 Action Program – Environment Protection Licence No. 10000

Condition No.	Action Details	Non-Compliance Code (where applicable)	Target/Action Date
O3.1	*Maintaining the Emergency Response Plan* The licensee must ensure that the Emergency Response Plan is maintained and that staff are made aware of which plan to use in case of an emergency.	**Code Red**	30 November 2011
M5.2	*Advertising the telephone complaints line to the public* The licensee must inform members of the community that the advertised telephone line is a complaints line that can be used by members of public for the purpose of making complaints.	**Code Blue**	16 December 2011

The EPA considers that the licensee should take the necessary actions to ensure that environmental performance is improved in relation to any matters identified as a Further Observation in Section 3.0 of this Report.

APPENDIX A

LICENSEES RESPONSE TO DRAFT REPORT

ABN 62 054 196 771
Olefines Plant, Botany

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16th November, 2011

Christopher Kelly
A/Manager Compliance and Assurance Section
Environment Protection and Regulation
Office of Environment and Heritage
PO Box A290
Sydney South
NSW 1232

Dear Mr Kelly

Re: Draft Compliance Audit Report – High Risk Facilities Audit
Qenos Pty Ltd (Licence Number 10000)

Thank you for the opportunity to comment on the draft report of the audit conducted on the 21 and 22 September 2011. Please find attached our comments on the two findings of non-compliance and the three observations as detailed in the draft audit report.

Yours sincerely

Richard Benson

Environment Advisor
Qenos – Botany Operations

Qenos Comments on Draft Compliance Audit Report – High Risk Facilities Audit, Conducted 21 and 22 September 2011

Comments on Section 2.0, Assessment of Compliance

Condition No. M5.2, Highlighted non-compliance against requirement to advertise telephone complaints line number to the public

Qenos as one of the Botany Industrial Park (BIP) member companies has operated a toll-free telephone hotline since 1999.The number for this hotline has been publically advertised through the annual BIP Brochure (which is distributed to over 4000 local homes), in periodically distributed information leaflets (relating to plant shutdowns, legacy projects and other activities), and in advertisements in local newspapers. The telephone number is identified as a means by which the community can obtain more information or communicate any concern they have about activities within the BIP.

The BIP also advertises the telephone number for the Emergency Response Service, which is a 24 hour service that can be using by the community to lodge complaints about activities on the BIP.

Although neither of these telephone numbers is explicitly advertised as "Telephone Complaints Lines", the local community have actively used both of these numbers to lodge complaints and raise concerns about activities across the BIP. Calls to these lines are promptly investigated and appropriate action, including notifications to regulators, if required is undertaken in a timely manner. Calls to the hotline number are discussed at the BIP Community Consultative Committee (BCC) meeting, which meets quarterly and is supported by both site representatives and community alike.

In future the hotline number will be advertised as an Enquiries/Complaints Line. This telephone number, in addition to being advertised as described above, will also be displayed at the main entrance to the BIP on Denison Street. The maintenance of a single point of contact for the BIP and its member companies is important for the local community, as it is often difficult to identify the source or nature of a complaint. The BIP will continue to coordinate investigations to ensure a timely response to the local community.

Condition No. O3.1, Highlighted non-compliance against requirement to maintain the emergency response plan

The audit identified a difference in the revision dates for the electronic and hard (or paper) copies of the Olefines emergency response plan (ERP). Although the revision dates were different, there was no actual difference between the copies in either content or format. The difference arose, when the paper copy was not reprinted pending a complete review of the Qenos-wide ERP that was underway at the time of the audit. There was a possible misconception that this difference in the revision dates points to inconsistencies in the way the plan is enacted. The Olefines ERP reviewed by the EPA was written using the same template as the other Qenos plants. The difference between the electronic and hard copies has now been rectified.

A complete review of the emergency response has led to the development of a new consolidated plan for Qenos Botany, rather than a series of individual Plant ERPs, which is based on the same template (which follows the latest HIPAP document) and has only changes to format and not content. The new format has been developed in consultation with the Major Hazard Facilities team and has been implemented to improve readability of the documents for Workcover.

Comments on Section 3.0, Further Observations

No. 1-Environmental Risk posed by overhead pipelines transporting liquid chemicals (Site Utilities)

The pipelines owned by Qenos are included in the environmental risk assessment. Appropriate inspections have been scheduled to ensure the continuing integrity of the pipelines. Risk assessments of those pipelines owned by other BIP member companies will be sought and control measures implemented as required.

No. 2- Monitoring the effectiveness of controls associated with the effluent treatment system and stormwater pits (Olefines)

Qenos has an established groundwater monitoring program to provide assurance over the physical integrity of the in-ground effluent treatment system and stormwater pits. To date, following a review of the data after each monitoring round, this program has not identified any evidence of leakage from the pits. Qenos will continue to undertake groundwater monitoring annually, as an on-going means of assessing the integrity of the pits. Qenos will also continue to undertake visual inspection integrity checks on a periodic basis during major maintenance shutdowns.

No. 3 – Unmarked stormwater valves and drains which could result in surface water pollution in an emergency situation

The audit identified one stormwater drain valve in the Olefines Loading which did not have clear markings to identify the open/closed positions. Further investigations have revealed that the valve was previously labelled, but the sign has been damaged and dislodged. Qenos has reinstated the signage and as part of a wider project will check the signage on other similar stormwater valves. All stormwater in the main Olefines plant area is collected in the first flush stormwater system, and only a small number of stormwater valves in areas assessed as low environmental risk outside of the main plant area drain directly to stormwater running through the BIP.

APPENDIX B

LETTER COVERING LICENSEES RESPONSE TO DRAFT COMPLIANCE AUDIT REPORT

NSW GOVERNMENT | Office of Environment & Heritage

Your reference:
Our reference: FIL11/9725
Contact: Edwina Howard , 02 9995 5422

Mr Richard Benson
Environment Advisor
Qenos Pty Ltd
16-20 Beauchamp Road
MATRAVILLE NSW 2036.

Dear Mr Benson

Re: Final Compliance Audit Report – High Risk Facilities Audit
Qenos Pty Ltd (Licence Number 10000)

The Environment Protection Authority (EPA) is pleased to present you with a copy of the Final Compliance Audit Report for Qenos Pty Ltd premises located at Matraville. The compliance audit was undertaken as part of the EPA's program of compliance audits across the state, focussing on industries that pose a high risk of environmental harm.

The comments provided by you in your letter dated 16 November 2011 have been considered when finalising the report (refer to the Attachment). Your comments have also been attached as an Appendix to the final report together with a copy of this letter. A copy of this report will be available in the EPA Library for public review.

I would like to take this opportunity to thank you and your staff for the co-operation during the audit. If you require further information or clarification on any matters regarding this audit, please do not hesitate to contact Stuart Clark on 02 9995 6835.

Yours sincerely

23/11/2011

CHRISTOPHER KELLY
A/Manager Compliance and Assurance Section
Environment Protection Authority

Enclosures:
- Attachment – EPA response to letter dated 16 November
- Final Audit Report Qenos Pty Ltd

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ATTACHMENT

Comments on Section 2.0 Assessment of Compliance

Condition No. M5.2

Advertising a telephone complaints line number to the public

The EPA notes the comments made and understands that the community does use the advertised numbers in order to contact the licensee about any concerns they have about activities across the BIP and to lodge complaints.

The EPA also notes the actions that the licensee intends to take in order to advertise the community hotline number as an 'Enquiries/Complaints' line, so that the community knows that this number can be used to make complaints.

Condition No. O3.1

Maintaining the emergency response plan

The EPA notes the comments provided.

Comments on Section 3.0 Further Observations

The EPA notes the comments provided.