



FINAL
COMPLIANCE AUDIT REPORT
UNITED INITIATORS PTY LTD
20-22 Mc-PHERSONS STREET
BANKSMEADOW NSW 2019

FEBRUARY 2012

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.

© 2012 State of NSW and Environment Protection Authority

The State of NSW and the Environment Protection Authority (EPA) are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged.

The EPA has compiled this publication in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. The EPA shall not be liable for any damage which may occur to any person or organisation taking action or not on the basis of this publication. Readers should seek appropriate advice when applying the information to their specific needs.

Published by:

Environment Protection Authority
59–61 Goulburn Street, Sydney
PO Box A290, Sydney South 1232
Phone: (02) 9995 5000 (switchboard)
Phone: 131 555 (environment information and publications requests)
Fax: (02) 9995 5999
TTY users: phone 133 677, then ask for 131 555
Speak and listen users: phone 1300 555 727, then ask for 131 555
Email: info@environment.nsw.gov.au
Website: www.epa.nsw.gov.au

Report pollution and environmental incidents

Environment Line: 131 555 (NSW only) or info@environment.nsw.gov.au
See also www.epa.nsw.gov.au

ISBN 978 1 74293 600 0
EPA 2012/0323
April 2012

EXECUTIVE SUMMARY

An Environment Protection Authority (EPA), Compliance Audit was undertaken was undertaken at the United Initiators Pty Ltd organic peroxide production facility located at Banksmeadow. 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 12485 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 13 December 2011.

The findings of the audit indicate that the enterprise was complying with the conditions attached to Environment Protection Licence 12485 issued under the Protection of the Environment Operations Act 1997.

TABLE OF CONTENTS

1.0 INTRODUCTION.....	5
1.1 Audit Objective	5
1.2 Scope of the Audit.....	5
1.3 Audit criteria, evidence and findings	5
1.4 Premises and Process Description.....	6
1.5 Statutory Instruments Issued to the Enterprise.....	6
1.6 Risk Assessment of Non-compliances	7
2.0 ASSESSMENT OF COMPLIANCE	8
2.1 Compliance with Audit Criteria	8
Table 2.1 Assessment of Compliance with Environment Protection Licence No. 12485	9
3.0 FURTHER OBSERVATIONS.....	17
4.0 ACTION PROGRAM.....	18
APPENDICES	
Appendix A	Licensee Response to Draft Report
Appendix B	Letter covering licensee's response to Draft Compliance Audit Report

1.0 INTRODUCTION

An Environment Protection Authority (EPA) Compliance Audit was undertaken at the United Initiators Pty Ltd organic peroxide production facility at Banksmeadow. 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 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 13 December 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 United Initiators Pty Ltd, in relation to the management of major environmental risks.

The temporal scope adopted for assessment of compliance is:

- The day 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 12485 issued under the POEO Act to United Initiators 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

United Initiators Pty Ltd operates an organic peroxide production facility at Banksmeadow.

Raw materials are delivered to the drum pumping bay and an air driven diaphragm pump is used to transfer the contents of the drum to one of five (5) measuring vessels. All reactions occur within the reactor.

Raw materials are added to the reactor in a strict sequence and the reaction profile (by varying the raw material feed rate) is controlled by control room operators.

Once the reaction is complete, the product is gravity fed to the filter. The transfer vessel is then evacuated and the product is transferred from the filter tank to the product tank.

Following transfer, the product is packed (5L or 25L packages) by gravity and stored for use.

Process water is collected in a retention pit and transferred via pipeline to the adjoining premises. Waster water is not discharged from the premises.

1.5 Statutory Instruments Issued to the Enterprise

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

Licence number 12485 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 *Dangerous goods production - 0 - 10000T* produced and *Chemical production waste generation > 5 - 100 T* generated and/or stored.

The anniversary date for the licence is 21 June.

A copy of Licence 12485 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		
		Certain	Likely	Less Likely
Level of Environmental Impact	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 12485 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 the conditions of the environment protection licence, relating to the audit scope were being complied with.

Details of assessment are presented in Table 2.1.

Table 2.1 Assessment of Compliance with Environment Protection Licence No. 12485

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
O	Operating Conditions <i>The audit assessment is based upon evidence relating to the period limited to on the day of the audit inspection.</i>		
O1.1 Licensed activities must be carried out in a competent manner	Managing major environmental risks associated with water pollution		
	Yes	<p>Identification of Major Environmental Risks</p> <p>The licensee has identified the major environmental risks associated with the pollution of stormwater at the premises. These include:</p> <ul style="list-style-type: none"> • Bulk chemical deliveries • Overflows from the product vessel. <p>The auditors did not identify any other major environmental risks during the site inspection that had not already been identified by the licensee.</p> <p>Use of controls to minimise the Major Environmental Risks Identified</p> <p>The licensee has controls in place to manage the major environmental risks identified such as:</p> <ul style="list-style-type: none"> • Equipment within the cell is suitably rated for hazardous zone • Bulk deliveries – connection to pipeline and operators are required to contact the control room prior to pumping. All pipelines are locked. • Secondary containment for underground tanks • Dipping prior to filling underground tanks • Immediate spill control for minor spills (tanker bund) • Site containment system permanently isolated to prevent offsite release 	

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
		<ul style="list-style-type: none"> • Site containment system is fitted with high level alarm • Site emergency response plan • Training • Proactive and reactive maintenance system • Regular Inspections • Continuous visual monitoring from the control room 	
		<p>Monitoring the effectiveness of the controls used by the licensee to manage the Major Environmental Risks</p> <p>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:</p> <ul style="list-style-type: none"> • Written procedures for operators delivering bulk chemicals • Refresher training for operators every 3 years • Testing and calibration of equipment (incl. instrumented equipment) • Integrity checks on underground tanks • Simulated drills • Routine testing of emergency alarms • Status reports on site operations with each shift changeover. • Roles and responsibilities are known by staff and senior emergency response staff • Automatic Shutdown of pipelines if a leak is detected 	

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
	Managing major environmental risks associated with air pollution		
	Yes	<p>Identification of Major Environmental Risks</p> <p>The licensee has identified the major environmental risks associated with the pollution of air at the premises. This includes the release of MEK/IsoPar L release from underground tanks.</p> <p>The auditors did not identify any other major environmental risks during the site inspection that had not already been identified by the licensee.</p> <p>Use of controls to minimise the Major Environmental Risks Identified:</p> <p>The licensee uses controls to manage the major environmental risks such as:</p> <ul style="list-style-type: none"> • Containment of underground tanks • Transfer are attended thru out the full transfer operation • Tanks are underground to minimise ventilation • Gravity feed for tank loading/filling • Integrity testing • Closed delivery system • Proactive and reactive maintenance system • Training • Fire fighting equipment on site <p>Monitoring the effectiveness of the controls used by the licensee to manage the Major Environmental Risks</p> <p>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:</p>	

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
		<ul style="list-style-type: none"> • Written Procedures • Continuous monitoring via the control room • Proactive and reactive maintenance system • Monitoring, alarms and trips • Testing and calibration of equipment • Refresher Training • Drills • Onsite fire fighting equipment • Emergency ESD • Control room attended at all times • Status reports on site operations with each shift changeover 	
Managing major environmental risks associated with fire and/or explosions			
	Yes	<p>Identification of Major Environmental Risks</p> <p>The licensee has identified the major environmental risks associated with fire and/or explosions at the premises. These include:</p> <ul style="list-style-type: none"> • Pumping incorrect material to the header tank • Decomposition of materials in the reactor • Heating of product in the reactor, filter, transfer and product vessel and condensed phase explosion • Accumulation of vapour inside reactor or cell • Accumulation of organics in the vacuum system <p>The auditors did not identify any other major environmental risks during the site inspection that had not already been identified by the licensee.</p>	

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
		<p>Use of controls to minimise the Major Environmental Risks Identified</p> <p>The licensee uses controls to manage the major environmental risks such as:</p> <ul style="list-style-type: none"> • High temperature detection probes and alarms fitted • Manual override option by control room operators • Sprinkler and deluge system and manual quench system on the reactor • Automatic reactor dump on high temp detection • Manual quench system on the reactor • Operate with small quantities of raw materials (batch process) • All vessels are located within a ventilated blast resistant structure • Training • Cleaning of product lines and vessels following each batch process • Compatible storage of chemicals • Drum check procedure prior to each use • Level gauge in the transfer vessel (high level in transfer vessel is alarmed indicating potential carry over of organics to the vacuum system) • Fluid detection within the vacuum line between the transfer vessel and vacuum pump 	

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
		<p>Monitoring the effectiveness of the controls used by the licensee to manage the Major Environmental Risks</p> <ul style="list-style-type: none"> • Written Procedures • Continuous monitoring via the control room • Regular maintenance • Monitoring, alarms and trips • Testing and calibration of equipment • Refresher Training • Testing of the deluge system • Drills • Onsite fire fighting equipment • Emergency ESD and alarm tested weekly • Control room attended at all times • Status reports on site operations with each shift changeover 	
		Managing Major Environmental Pollution Incidents	
	Yes	<p>Procedures, processes and equipment for managing major environmental pollution incidents</p> <p>The licensee has procedures, processes and equipment in place to manage major environmental incidents. The procedures include;</p> <ul style="list-style-type: none"> • Emergency response procedures for major risks identified including emergency shut down procedures • Evacuation of personnel and notification to Senior Licensee management • Notification to relevant agencies such as NSW Fire Services, Health, Workcover NSW and EPA 	

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
		<ul style="list-style-type: none"> • Staff training in emergency response procedures • Assigning roles and responsibilities to key personnel • Availability of emergency response equipment • Routine testing of emergency alarms 	
O5.1	Yes	Emergency Response Plan <i>Documentation systems and procedures within the Emergency Response Plan to deal with all types of incidents. A copy of the plan is maintained onsite.</i>	
M	MONITORING CONDITIONS <i>The audit assessment is based upon evidence relating to the period limited to 12 months prior to the end of the audit inspection.</i>		
M4.1, M4.2 & M4.4	Recording of pollution complaints These conditions were not applicable at the time of the audit as there is no evidence to indicate that any pollution complaints were received during the audit scope that required recording. However it is noted that the licensee has mechanisms in place to record all the required details if any complaints are received that relate to pollution from the premises.		
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	Yes	Advertising the telephone complaints line number to the public The licensee has advertised the telephone complaints line on the entrance gate to the premises.	
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 that M5.1 and M5.2 do apply as the licence was been issued for more than 3 months.		
R	REPORTING CONDITIONS <i>The audit assessment is based upon evidence relating to the period limited to 12 months prior to the end of the audit inspection.</i>		

Statutory Instrument: Environment Protection Licence No. 12485			
Condition No.	Compliance/ Risk assessment for non-compliance *	Comment	Action required by licensee
R2.1 & R2.2	Notification of environmental harm These requirements did not apply as no incidents causing or threatening material harm to the environment occurred within the scope of the audit.		

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.

No further observations were noted during the audit inspection.

4.0 ACTION PROGRAM

There were no non-compliances identified as part of the audit.

APPENDIX A

LICENSEES RESPONSE TO DRAFT REPORT

(Refer to Appendix B)

APPENDIX B

**LETTER COVERING LICENSEES RESPONSE TO DRAFT COMPLIANCE AUDIT
REPORT**



ENVIRONMENT PROTECTION AUTHORITY

Your reference:
Our reference: FIL10/9720
Contact: Nicole Wilmot 02 9995 5427

Mr Peter Smith
United Initiators Pty Limited
PO Box 18
BOTANY NSW 1455

Dear Mr Smith


**Re: Final Compliance Audit Report – High Risk Facilities Audit
United Initiators Pty Limited (Licence Number 12485)**

The Environment Protection Authority (EPA) is pleased to present you with a copy of the Final Compliance Audit Report for United Initiators Pty Limited (Licence Number 12485) located at Banksmeadow. 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 EPA acknowledges from the email received on 9 February 2012 that your company concurs with the report and a copy of this letter has been attached as an Appendix to the final report. 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 Dana Alderson on 02 9995 6851.

Yours sincerely



10/2/2012

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

Enclosure: Final Audit Report: United Initiators Pty Limited