

Notice is given that an ordinary meeting of the Nelson Regional Sewerage Business Unit will be held on:

Date: Friday 30 June 2017
Time:
Meeting Room: Nelson City Council
Venue: Ruma Marama
Civic House
110 Trafalgar Street, Nelson

Nelson Regional Sewerage Business Unit

AGENDA

MEMBERSHIP

Chairperson Michael Higgins
Members Cr Kit Maling
Cr Tim Skinner
Cr Stuart Walker

(Quorum 2 members)

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AGENDA

1 OPENING, WELCOME

2 APOLOGIES AND LEAVE OF ABSENCE

Recommendation

That apologies be accepted.

3 DECLARATIONS OF INTEREST

4 PUBLIC FORUM

5 CONFIRMATION OF MINUTES

6 PRESENTATIONS

Nil

7 REPORTS

7.1 General Managers Update Report 5

7 REPORTS

7.1 GENERAL MANAGERS UPDATE REPORT

Information Only - No Decision Required

Report To: Nelson Regional Sewerage Business Unit
Meeting Date: 30 June 2017
Report Author: Richard Kirby, Engineering Services Manager
Report Number: NRSBU17-06-01

1 Summary

1.1 This is the General Manager's update report.

2 Draft Resolution

That the Nelson Regional Sewerage Business Unit Committee receives the report NRSBU General Manager's Report, NRSBU17-06-01 and its attachments.

3 Purpose of the Report

- 3.1 To report on the NRSBU operational activities over the last few months and outline what is proposed over the next few months.

4 Accidental Discharge Consent

- 4.1 The NRSBU lodged an application for a resource consent with the consenting authority (Nelson City Council) on 23 July 2015. Up until that time there was no consent and no requirement for a consent for this type of activity. The updated Nelson Resource Management Plan (NRMP) indicated that a consent for an accidental discharge of untreated wastewater into the estuary was required.
- 4.2 The consenting authority subsequently requested additional information to support the application. This was collated and lodged on 29 February 2016.
- 4.3 The application was publicly notified in August/September 2016 and submissions closed at the beginning of November 2016.
- 4.4 Thirty five submissions were received.
- One submission was in support of the consent.
 - Four of the submissions did not oppose the consent application and asked to be heard.
 - The other submissions all opposed the application submission mainly on the grounds that the discharge of any untreated wastewater to the Waimea Inlet is unacceptable
- 4.5 During the preparation of the officers' report, the consenting authority expressed some concerns regarding compliance with the NRMP. The NRSBU was made aware of these concerns. The NRSBU felt that the consenting authority's advisors were tending towards viewing the application as a consent to 'deliberately' discharge untreated wastewater. This is certainly not the intention of the application nor the intention of the NRSBU. The NRSBU's objective has always been to minimise and if possible eliminate the occurrences of untreated wastewater discharges.
- 4.6 The key issue is around the aspect of an 'accidental' or 'aberrational' discharge. Although the NRSBU has implemented improvements over the last few years to minimise and manage accidental discharges, increasingly these are caused by events outside the control of the NRSBU.
- 4.7 The caucusing with the consenting authority has taken time and consequently the NRSBU was required to apply for a suspension of the processing of the application to allow for caucusing between the NRSBU witnesses and the consent authority advisors.
- 4.8 The consenting authority has subsequently agreed to suspend the processing of the consent application. The hearing is now set to take place in December 2017.
- 4.9 During this caucusing phase the NRSBU sought a legal opinion to confirm whether a resource consent for accidental discharges was required under the NRMP. The legal opinion indicated that given the statutory constraints it was prudent that the NRSBU does seek a consent for accidental discharges.

- 4.10 The Tasman Resource Management Plan (TRMP) consider such discharges prohibited and therefore unconsentable. As such any accidental discharges are dealt with under RMA s330 related to emergency works.
- 4.11 The following table gives an indication of the committed costs to date and what has been spent.

	Cost to date	Committed
Landmark lile	\$35,364	\$60,104
Cawthron	\$41,066	\$54,086
Fluent	\$8,376	\$14,500
R&R	\$1,140	\$1,140
CIA	\$2,500	\$2,500
Legal	\$21,282	\$71,282
Niwa	\$6,381	\$15,000
Consent Authority	\$15,617	\$15,617
	\$131,725	\$234,228

Table 3.11 Showing Committed and cost to date for the Accidental Discharge Resource Consent Application

5 Biosolids research trial site and Biosolids Consent Renewal

- 5.1 The NRSBU has a consent to apply biosolids amongst the trees on Moturoa/Rabbit Island. This consent expires in 2020.
- 5.2 The NRSBU has part funded research conducted by SCION on the effects of biosolid application on the productivity of the forest at a trial site on Rabbit Island.
- 5.3 The research by SCION has a direct impact on future biosolid application/disposal. The research to date has not addressed the residual effects of biosolid-derived nutrients and contaminants on the receiving environment. (Following a previous study the NRSBU decided that the current biosolids application methodology provides the best economic value.)
- 5.4 A better understanding is needed to determine how much of the nutrients and contaminants from biosolid application is retained in the pine live biomass, floor litter, soil and groundwater. It is intended that this research will shape the content of a future consent application.
- 5.5 SCION will be meeting with the NRSBU in July 2017 to present their research findings and present suggestions for further research work.

6 Bell Island Discharge Consent Renewal

- 6.1 The discharge consents for the Bell Island Wastewater Treatment Plant expire on 7 February 2018. At its meeting in September 2016 the NRSBU considered the details and timeline for the consent application. In order to continue operating under the consents the application needed to be lodged by 7 August 2017, 6 months prior to expiry date.

- 6.2 In December 2016, MWH/Stantec were engaged as the primary consultant to prepare the application.
- 6.3 The objectives for the consent renewal process are as follows;
- 6.3.1 To work with the community, key stakeholders, and tāngata whenua to ensure a wastewater treatment and disposal solution that:
- *Provides for current and future community well-being, health and safety*
 - *Ensures acceptable environmental and cultural effects*
 - *Provides for planned future population and industrial/commercial growth*
 - *Achieves efficient use of existing infrastructure*
- 6.3.2 Obtain long term consents that provide certainty for future growth and security for ongoing investment in the infrastructure
- 6.3.3 Provide a solution that is the Best Practicable Option (RMA definition) for the treatment and disposal of the wastewater.
- 6.4 The following consents are being renewed with this application;
- Discharge treated wastewater to Waimea Inlet
 - Discharge treated wastewater to land (irrigation)
 - Discharge contaminants (odour) to air from WWTP
- 6.5 The NRSBU is also seeking new consents for the following activities;
- Seepage from unlined parts of WWTP to land (oxidation ponds) – technically a discharge to land
 - Outfall diffuser structure – coastal permit for structure within the Coastal Marine Area (CMA)
- 6.6 The activities within these new consents were included in earlier applications but consents were not specifically granted for them. Now the NRSBU is seeking to formally authorise these activities.
- 6.7 The consent for applying biosolids at Moturoa/Rabbit Island does not expire until November 2020. The NRSBU has decided not to include renewing this consent as part of this application.
- 6.8 Stakeholder consultation, public health risk assessment, assessment of existing treatment plant performance, assessment of land disposal alternatives, assessment of future wastewater discharge quality, preparation of assessment of effects on the environment and facilitation of stakeholder consultation.
- 6.9 Following a review of the consenting process it was decided that a quantitative microbial risk assessment (QMRA) is required to estimate the health risk to people who are using the Bell Island discharge receiving water for recreational purposes and seafood harvesting.
- 6.10 The model will assist the project team to understand the range of effects that the discharge from the Bell Island treatment facility has on public health and determine whether further upgrades are required.

- 6.11 MetOcean Solutions Limited was instructed to develop a hydrodynamic model that will be used to inform the QMRA.
- 6.12 The Hydrodynamic Model is currently being calibrated and will be used to run a two year sequence of discharges and can in future be used to determine the effects of any specific discharge into the Waimea Inlet.
- 6.13 The budget estimates and costs to date for the project are shown in the following table.

	Contract Value/Estimate	Cost to date
Primary consultant	\$220,000	\$80,587
Legal	\$40,000	\$18,201
Iwi Liaison/CIA	\$16,000	\$2,871
Environmental assessment	\$70,000	\$26,153
Hydrodynamic model	\$60,000	\$0
Hydrodynamic Field work	\$25,000	\$0
Iwi facilitation (Estimate)	\$15,000	\$345
Consent fees (Estimate)	\$30,000	\$0
Total	\$476,000	\$128,156

Table 5.13 showing Estimates and costs to date for the Research and Preparation of the Discharge Consent Application

- 6.14 A stakeholder meeting took place on 15 June 2017 at the Headingly Centre. Several stakeholders turned up and heard presentations on the consent application and studies that have been undertaken.
- 6.15 A HUI and site visit with Iwi is scheduled for 7 July 2017. Information has been distributed to Iwi prior to the HUI.
- 6.16 Given the extent of the work required to compile the consent applications, the NRSBU requested an extension from the consenting authority on the deadline for lodging the consent. This was granted on 17 May 2017 and the consent applications need to be lodged by 7 November 2017.
- 6.17 The NRSBU can continue to operate under resource consents on condition that the application is lodged by 7 November 2017.
- 6.18 The programme for the consent application is summarised as follows;
- Complete additional studies
 - Continue consultation with stakeholders
 - Prepare consent application and AEE
 - Lodge renewal application no later than **7 November 2017**
 - Application will be seeking 35 year duration
 - Expected to be publicly notified early 2018 – open for public submissions
 - Hearing expected mid-2018
 - Decision expected mid/late-2018

- 6.19 The Hydrodynamic Model is currently being calibrated and will be used to run a two year sequence of discharges and can in future be used to determine the effects of any specific discharge into the Waimea Inlet.

7 Mussel Monitoring April 2017

- 7.1 Cawthron Institute has been commissioned by the NRSBU to undertake twice-yearly (summer and winter) shellfish monitoring surveys. These are to identify any potential bacteriological water quality issues at inner Tasman Bay sites in the vicinity of the Bell Island outfall.
- 7.2 The report describes the results of the April (summer) 2016–2017 survey. It confirms that there is no suggestion that phytoplankton community structures are affected by the Bell Island treated wastewater discharge and that there was no detectable contribution from the Bell Island wastewater outfall in the water samples.

8 Contract 3458 – Operation and Maintenance

- 8.1 The reticulation and treatment operations have continued as normal over the last few months. The effluent discharge continues to meet consent conditions and sludge produced at the treatment plant continues to comply with Class A biosolids quality.
- 8.2 During preparation of the discharge consent application, a question was raised as to the risks associated with human viruses discharged from Bell Island. An assessment of the treatment plant configuration and capacity showed that it is sufficient to reduce human viruses to levels that would not pose a risk in the discharge to the estuary. This should be confirmed in the QRMA (quantitative microbial risk assessment) research.
- 8.3 As a result of this assessment, Nelmac has modified the treatment plant processes to maximise the removal of human viruses. This involved reintroducing the activated sludge process to the full extent.
- 8.4 The hydrodynamic model and QMRA should also provide information that will allow the treatment plant to be operated cost-effectively (power savings) without compromising public health.
- 8.5 A dramatic increase in fat arriving at the treatment plant over the last two months has affected the operation of the screens and primary clarifier. The increase in fat caused intermittent blockages in the primary sludge transfer pipelines affecting the primary sludge affected sludge transfer processes.
- 8.6 The principal source of the fat material was identified and the Nelson City Council are working on a resolution. The issue highlighted the potential improvements both councils could implement to manage trade waste discharges into the NRSBU reticulation and treatment plant.
- 8.7 The primary sludge wasting procedures were modified in November 2016. Since then the sludge concentrations have consistently exceeded concentrations those that a belt thickener would produce. Potentially this modification could decrease the dependence on chemicals to thicken sludge and thereby reduce operating costs.

9 Contract 3619 – Biosolids Operation

- 9.1 It is projected that 29,500m³ (Budget 2016/17 = 29,000m³) of biosolids will be sprayed this year.
- 9.2 The cost of biosolid application for the year will come to about \$620,000 and is estimated to exceed the budget by \$71,000. (The increased expenditure is directly related to increased costs associated with the new biosolids application contract).

10 Key Performance Indicators

10.1 The outcomes of key performance indicators for the 3 month period to 31 May 2017.

Environmental: Treatment and Disposal			
RMA consent - wastewater Discharge to Coastal Marine Area	RMA Consent - Discharge of Contaminants to Air (Odour complaints)	RMA Consent - Discharge of Contaminants to Land	Equipment Failure of critical components within treatment and disposal system
Environmental: Pump Stations			
Odour complaints from pump stations	Pump station wet weather overflows	Pump station overflows resulting from power failure	Pump station overflows resulting from mechanical failure
Environmental: Pipeline			
Reticulation breaks	Air valve malfunction		
Capacity: Overloading system capacity			
Treatment & Disposal	Pump Stations		
Reliability: Equipment failure of critical components			
Treatment & Disposal	Pump Stations	Pipelines	
Responsiveness: Speed of response for emergency and urgent maintenance works			
Treatment & Disposal	Pump Stations	Pipelines	
Responsiveness: Speed of response for routine and programmable maintenance works			
Treatment & Disposal	Pump Stations	Pipelines	
Key customer relationships: Overall satisfaction			
Treatment & Disposal	Pump Stations	Pipelines	

11 Compliance Outcome

11.1 The compliance outcomes for the 12 months to 31 May 2017 are outlined in the following table:

i)	Resource Consent Compliance (rolling 12 month record)	
	➤ Discharge to Estuary Permit	Achieved.
	➤ Accidental discharges (Consent for accidental discharges within Nelson City Council area is being sought at present)	An overflow occurred at the Songer Street during wet weather conditions when both storm pumps blocked on 22 June 2016. Biosolids overflow to land and the Waimea estuary following a blow out on biosolids transfer pipeline on 19 and 20 July 2016.
	➤ Discharge to Air Permit	100% Compliance
	➤ Biosolids Disposal	100% Compliance
	➤ Discharge treated waste water to land	100% Compliance
ii)	Odour Notifications	
	➤ Past three months	Nil.
	➤ Last 12 months	Nil.
iii)	Overflows	
	➤ Past three months	Nil.
	➤ Last 12 months	Two.
iv)	Speed of response for maintenance works	
	In past three months:	
	<ul style="list-style-type: none"> ➤ Four call outs were recorded of which three were associated with treatment plant issues. <ul style="list-style-type: none"> • Return activated sludge pump fault – 1 event. • Primary clarifier sludge pumps – 1 event. • Biosolids mixer alarm – 1 event. ➤ An operator responded to a low level alarm at the Richmond pump station. Alarm status issue sent to Scada contractor for action. 	
	➤ Response within 30 minutes. Achieved.	

12 Review of Action Plan Implementation – 2014 Asset Management Plan and 2016/17 Business Plan

12.1 The following table indicates the draft time lines for the individual action items:

IP	Business Plan Action	Target Date	Completion Date	Comments
1	Review manuals annually.	Apr 2017		Delayed. Contract manuals are reviewed annually by the contractor and submitted to the NRSBU for review. All the manuals have been reviewed with the exception of the Operation and Maintenance Manual. It is expected that this will be completed in June 2017.
2	Consolidate all natural disaster information and review 3 yearly.	Oct 2017		Work will be carried out as part of next asset management review.
3	Internal benchmarking carried out annually.	Jun 2016	Aug 2016	Carried out as part of annual report.
4	Review risk of contributors leaving NRSBU.	Jun 2016	Dec 2015	Completed.
5	Review capacity of treatment components.	Dec 2017		Expect treatment plant model to be in place late 2017. This will follow an assessment of S::can results.
6	Programme for pipe inspections.	Aug 2017		Included in annual review of Operation and Maintenance Plan.
7	Annual review of contractor performance.	Dec 2016	Jun 2016	Completed.
8	Screen upgrade.	April 2017	Jun 2017	Completed
9	Review secondary sludge separation.	Dec 2017		Depends on completion of treatment plant model.
10	Construction second sludge storage tank.	Jun 2018		Delayed from June 2016.
11	Develop sludge removal programme.	May 2018		Subject to review of the performance of the improvement of mixing in F2.

IP	Business Plan Action	Target Date	Completion Date	Comments
12	Review effluent discharge management.	Mar 2016	Jan 2016	Completed.
13	Renewal of effluent discharge permit	Aug 2018		On schedule.
AP	AMP Action	Target Date	Completion Date	Comments
1	Annual customer survey.	Mar 2017		Responses have been received from two of the five contributors. Reminders have been sent out and representatives contacted by telephone.
2	Business Continuity Plan review.	Jun 2016	Jun 2016	Completed.
3	Consider benefits of succession planning and how it might be implemented once governance issues (TDC and NCC) have been resolved.	Jun 2016	June 2016	Completed.
4	Review of security required at all facilities.	Mar 2016	May 2016	Completed.
5	Monitor sludge levels in ponds and ascertain long term removal and disposal requirements.	Mar 2016	Feb 2006	Completed.
6	Improve reporting requirements for asset condition, performance and maintenance from maintenance contractor.	Mar 2016	Apr 2016	Completed.
7	Implementation of internal bench marking (using historical data) of NRSBU network, pump stations, treatment and disposal facilities.	Oct 2017		Still to be initiated

IP	Business Plan Action	Target Date	Completion Date	Comments
8	Develop Demand Management Policy.	Jun 2016	Jun 2016	Completed.

13 Health and Safety

13.1 There have been 24 inductions and 362 visitors to the Bell Island WWTP over the past three months.

13.2 Two Health and Safety incidents were reported.

- Minor cut to finger when cleaning up after a beaker was dropped in the laboratory.
- High gas levels reported at inlet and thickening building. Investigations continuing. Operators issued with gas masks when they work in these areas.

14 Financial Status

14.1 Expenditure is tracking above budget. Operational costs are currently projected to exceed the budget by around \$250,000. (Financial report attached).

14.2 This additional cost is mainly due to re-active maintenance work that was not budgeted for. Such as:

- 14.2.1 Biosolids transfer pipeline blockages and the blow out which was not budgeted for = \$42,000;
- 14.2.2 Primary sludge transfer pipeline blockages and damage to screens resulting due to excessive fat coming into the treatment plant = \$26,000;
- 14.2.3 Volume of biosolids treated exceeding the budgeted volume;
- 14.2.4 Increased use of belt thickener to thicken primary sludge = \$34,200;
- 14.2.5 Argentine ants = \$23,000;
- 14.2.6 Recirculation trial = \$13,000;
- 14.2.7 Incorrect allocation for hydrodynamic model = \$23,490.

14.3 A review of expenditure has shown that some of the costs of renewal works and capital works have been incorrectly allocated to operational budgets. This will be corrected in early July and will be reflected in the Annual Report and in the end of year reconciliation.

15 Attachments

- | | | |
|----|------------------------|----|
| 1. | NRSBU Status Report | 17 |
| 2. | NRSBU Financial Report | 19 |

NRSBU STATUS REPORT - 30 June 2017							
No	Meeting Date	Document Number	Report Date	Report Title / Item Title	Officer	Resolution or Action or Issue	Status
a	16/09/16	R6501	16/09/16	General Manager's Report	J Thiant	Redevelopment of valuation process.	Revaluation programmed for completion in July 2017.
b	10/03/17	R7164	10/03/17	GM report		Treated wastewater recirculation.	The trial was completed in April 2017 and the outcome is being reviewed and will be reported on in a future GM report.
c	24/06/16	M1761	24/06/16	Minutes	J Thiant	Review of Trade Waste Agreement Amendments.	Signed agreements received from TDC and Alliance. Reminders sent to other contributors.
d	24/06/16	M1761	24/06/16	Minutes	J Thiant	Cawthron assessment of the capacity of Bell Island for the disposal of sludge to land.	Project deferred until we have evaluated the outcome of the Accel-o-Fac upgrade of the ponds.
e	24/06/16	M1761	24/06/16	Minutes	R Kirby	Accidental discharge consent application.	The hearing is set to take place at the beginning of December 2017. Update included in GM report.
1	9/12/16	M2249	9/12/16	Minutes	J Thiant	Requests that the outcome of the monitoring be reported back to the NRSBU for approval prior to the remaining 50% payment being made to Gurney Environmental.	The mixers have been installed in April 2017 and evaluation is continuing.
2	10/03/17	R7164	10/03/17	GM report		Approves expenditure up to \$29,000 in the 2017/18 year for the initial eradication treatment of Argentine Ants at Bell Island, scheduled for November 2017.	The initial baiting for Argentine Ants were carried out in March 2017 and the success of the programme will be evaluated in October 2017.
3	9/12/16	R6834				Approves adding the option of including the installation of permanent backup generation for the Inlet Structure and Discharge Pump (250 kVa) in the draft Business Plan 2017/18.	To be included in AMP.
4	19/06/15	M1272	19/06/15	General Manager's report		THAT NRSBU contribute an amount of \$20,000 for the completion of the research by SCION payable on receipt of the final environmental report; AND THAT NRSBU contribute an amount of \$10,000 payable on receipt for the final harvest report.	Awaiting report from SCION
5	22/06/12	1307226	22/06/12	Bell Island Energy Audit	J Thiant	AND THAT the optimisation of O ₂ levels in the aeration basin will be considered as part of the waste water treatment capacity review; AND THAT the cost of changing the point of supply for the ponds and irrigation pump station will be investigated in order to establish the return on capital investment.	To be included in AMP. Contractor instructed to investigate the cost of integrating the power supply to the ponds and the irrigation pump station.

**Nelson Regional Sewerage Business Unit
Financial Report
Income Account for the period to 30th May 2017**

	Actual Month	Budget Month	Actual YTD	% YTD	% Year	2016/17 Budget		YTD Variation
						YTD	Annual	
Income								
Contributions Fixed	315,091	405,667	3,465,996	78	71	4,462,300	4,868,000	(996,304)
Contributions Variable	291,348	240,333	2,892,750	109	100	2,643,700	2,884,000	249,050
Other Recoveries	13,620	13,000	136,675	96	88	143,000	156,000	(6,325)
Interest	1	83	243	27	24	900	1,000	(657)
Forestry Income	-	-	-	-	-	-	-	0
Revaluation Derivative Instruments	-	-	-	-	-	-	-	-
Vested Assets	-	-	-	-	-	-	-	-
Total Income	620,060	659,083	6,495,664	90	82	7,249,900	7,909,000	(754,236)
Less Expenses								
Management	19,584	17,723	220,952	113	104	194,900	212,670	(26,052)
Electricity	85,382	68,718	656,719	87	80	755,900	824,600	99,181
Contract Maintenance	52,014	58,730	634,786	98	90	646,000	704,732	11,214
Reactive and Proactive Maintenance	60,515	36,256	607,604	152	140	398,800	435,019	(208,804)
Monitoring	54,624	8,470	212,815	228	209	93,200	101,641	(119,615)
Consultancy	3,554	6,250	35,587	52	47	68,800	75,000	33,213
Insurance	3,947	5,250	43,413	75	69	57,800	63,000	14,387
Sundry	401	6,179	72,048	106	97	68,000	74,155	(4,048)
Biosolids Disposal	43,680	45,730	517,191	103	94	503,000	548,760	(14,191)
Operating & Maintenance Expenses	323,699	253,306	3,001,115	108	99	2,786,400	3,039,577	(214,715)
Financial	41,098	72,833	448,883	56	51	801,200	874,000	352,317
Depreciation	145,726	151,750	1,602,981	96	88	1,669,300	1,821,000	66,319
Total Expenses	510,523	477,889	5,052,979	96	88	5,256,900	5,734,577	203,921
Net Income before Rebate	109,537	181,194	1,442,685	72	66	1,993,000	2,174,423	(550,315)
Owners rebate	0	0	0					
Net Income after rebate	109,537	181,194	1,442,685			1,993,000	2,174,423	(550,315)

Nelson Regional Sewerage Business Unit

	Balance Sheet as at 30th May 2017		
	Current	Last Month	June 2016
Equity			
Opening Equity (July)	39,605,045	39,605,045	38,749,766
Plus Net Income YTD	1,442,685	1,333,148	0
Plus Revaluation	0	0	855,279
Closing Equity	41,047,729	40,938,193	39,605,045
Contingency Reserve	100,000	100,000	100,000
	41,147,729	41,038,193	39,705,045
Which was Invested as follows -			
Current Assets			
Bank	33,746	18,425	344,874
Debtors	205,094	209,378	51,358
NCC Current account	0	125,822	64,915
Total Current Assets	238,840	353,624	461,148
Fixed Assets	55,595,687	55,376,236	55,601,384
Current Liabilities			
Creditors	(37,513)	(54,785)	(101,639)
NCC Loan	(350,000)	(450,000)	0
TDC Current Account	(186,882)	(186,882)	(815,553)
NCC Current account	(112,403)	0	(1,440,295)
Total Current Liabilities	(686,797)	(691,667)	(2,357,487)
Term Liabilities	(14,000,000)	(14,000,000)	(14,000,000)
Derivative Financial Instruments	0	0	0
	41,147,729	41,038,193	39,705,045