ANNEXURE C

Title: Regulatory Reporting Manual Volume 7
Petroleum Pipelines Non-Financial Information

Purpose: To prescribe and guide the regulated entities in the Energy Sector on **non-financial information (NFI)** required by the Energy Regulator, in order to achieve uniformity in content, measurement, preparation format and submission to the Energy Regulator to perform its functions.

Final version: 27 November 2013
Approval Date: 26 March 2015
Effective Date: 01 April 2016

Table of Contents

1 Introduction

1.1 List of Acronyms/Abbreviations

1.	AVGas	Aviation Gasoline
2.	AVTUR	Aviation Turbine Fuel
3.	BBBEE	Broad Based Black Economic Empowerment
4.	Bbl	Barrel
5.	Btu	British thermal unit
6.	DoE	Department of Energy
7.	DSL	Diesel
8.	GIS	Geographic Information System
9.	HFO	Heavy Fuel Oil
10.	HDSA	Historically Disadvantaged South Africans
11.	JetA1	Jet Fuel Type A1
12.	LIS	Licensee information System
13.	LFC	Liquid Fuels Charter
14.	LPG	Liquefied Petroleum Gas
15.	LRP	Lead Replacement Petrol
16.	NERSA	National Energy Regulator of South Africa
17.	NFI	Non-Financial Information
18.	OH&SA	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
19.	PPA	Petroleum Pipelines Act
20.	RRM	Regulatory Reporting Manuals
21.	RRS	Regulatory Reporting System
22.	SLOPS	Intermingled or dirty petroleum fuels
23.	Synjet	Synthetic Jet Fuel
24.	Toe	Ton of oil equivalent
25.	ULP	Unleaded Petrol

1.2 General Glossary of Terminology and Definitions

1. Department - Department of Energy of the Republic of South Africa.
2. Energy Regulator - National Energy Regulator of South Africa (NERSA) established in terms of section 3 of the National Energy Regulator Act, 2004 (Act No 40 of 2004).
3. Government - Government of the Republic in South Africa.
4. Historically disadvantaged South Africans – refers to all persons and groups who have been previously discriminated against on the basis of race, gender and disability

5. Licensee - a holder of a licence granted or deemed to have been granted by the Energy Regulator under the Petroleum Pipelines Act, 2003 (Act No 60 of 2003). Licensee and Regulated Entity shall be used interchangeably
6. Manual - Non Financial Information (NFI) Regulatory Reporting Manual.
7. Minister - Minister of Energy.
8. Petroleum Pipelines Act - Petroleum Pipelines Act, 2003 (Act No 60 of 2003).
9. Regulated Business - any licensee, service or activity that is subject to regulation by the NERSA in terms of the National Energy Regulator Act No 40 of 2004, the Petroleum Pipelines Act No 60 of 2003.
10. Regulated Entity - Regulated Business.
11. Unregulated Business - entity, service or activity that is not subject to regulation by the Energy Regulator.

1.3 Petroleum Pipelines Terminology and Definitions

1. Batch or slug size: A quantity of petroleum of like specifications moved through the pipeline, stored in a tank, loaded/discharged, as an identifiable, individual unit.
2. Charter or Liquid Fuels Charter - Charter for the South African Petroleum and Liquid Fuels Industry on Empowering Historically Disadvantaged South Africans in the Petroleum and Liquid Fuels Industry.
3. Design Capacity - The maximum capacity that a pipeline, storage tank or loading facility is capable of handling or holding based on theoretical calculations and design criteria. [*See "Name plate rating" and "Throughput" below*]
4. Licensed capacity - The combined design capacity as licensed by NERSA. Depending on the type of facility, it could be cubic meters or litres per minute
5. Line-fill - petroleum owned by the company and used to maintain pipelines in a condition for the transportation by pipeline of commercial petroleum. [*See Storage facilities un-pumbable stock below*]
6. Liquefied petroleum gas (LPG) - Liquefied petroleum gas is a gas containing certain specific hydrocarbons which are gaseous under normal atmospheric conditions, but can be liquefied under moderate pressure at normal temperatures. A mixture of propane and butane is LPG used for heating and cooking.
7. Loading facility - means any marine facility that is or can be used to load or off-load petroleum and includes any auxiliary pipelines connected thereto but excludes bunkering facilities
8. Nameplate Rating - is the full load/volume/throughput continuous rating of a petroleum pipeline, storage facility or loading facility under specified conditions as designated by the manufacturers. It is usually indicated on a nameplate attached mechanically to the individual machine or device. [*See "Design Capacity" above and "Throughput" below*]

9. Operational capacity - is typically less than design capacity due to additional practical constraints. (e.g. for a storage tank it excludes the tank bottoms and headstock).
10. Period of operation - indicates the period during which the facility has been in operation during the reference (reporting) period.
11. Pipeline – pipeline used to transport petroleum excluding those located on the premises of (a) a manufacturer of petroleum products; (b) a storage facility; (c) a retailer of petroleum products; and an agricultural cooperative.
12. Planned outages (or planned maintenance down time) – Scheduled interruption of a system for maintenance.
13. Contracted obligations - contractual shared use of petroleum storage facilities and or/co-owner of the facility. Own use and contractual accommodation volume and transactions are subtracted to derive uncommitted capacity
14. Tank Farm - is a location of a group of tanks maintained by a licensee and used to store crude oil and refined products. The tanks normally store many different types of petroleum products, which are transported to and from the tank farm through pipelines
15. Tank headstock – the volume in a tank between the point of maximum safe operating capacity and maximum physical volume
16. Third party access - the contracted right of a party, who is neither a co-owner or joint-venture partner, to access the facilities.
17. Throughput – volume for which a petroleum pipeline, storage facility or loading facility is rated by the user or by the manufacturer [*See "Design Capacity" and "Name plate rating" above*].
18. Uncommitted capacity - means capacity determined by the Energy Regulator that is not required to meet contractual obligations
19. Unplanned outages (or unplanned maintenance down time) – Unscheduled interruption of a system for maintenance.
20. Un-pumpable stock - quantity of petroleum product that cannot be utilised since it typically is below the point at which the product is withdrawn. For storage facilities, this will typically be the tank bottom. [*See Pipeline line-fill above*]
21. User - is a customer as contemplated by the Act. The user of the pipeline or storage service (rather than the consumer of the final product) is the customer of the owner or operator of the licensed facility.

1.4 Preamble

The Energy Regulator requires sufficient and accurate information from regulated entities in order to make well informed decisions on issues of market supply and demand, competition development, service quality, service availability, financial health of the regulated entities and setting/approval of fair and reasonable tariffs aligned with public interest.

To gather that information, the Energy Regulator is issuing this (Non Financial Information (NFI) Manual, in addition to the already issued Regulatory Reporting Manual (RRM), to guide the licensees in recording and regularly submitting to the Energy Regulator, its non-financial information, both in a systematic and consistent way.

The goal is to have regular, systematic, consistent, and sufficient non-financial information relevant to economic regulation, to enhance efficiency and transparency of the regulatory process.

The NFI manuals are in three volumes, Volume, 5, Volume 6 and Volume 7, with each volume being for the respective regulated industry. This Volume 7 contains petroleum pipelines industry specific prescription, guidance, terminologies definitions, measurement approach, reporting time frames, and reporting templates.

1.5 NERSA Legislative Mandate to Prescribe Reporting Requirements

The legal basis on which NERSA requires NFI is in terms of the following:-

- Petroleum Pipelines Act, 2003 (Act No 60 of 2003) (the Act)
- Regulations in terms of the Petroleum Pipelines Act, 2003 (Act No 60 of 2003) GNR. 342 in Government Gazette No. 30905 of 4 April 2008 (the Regulations)
- The Rules in terms of Petroleum Pipelines Act, 2003 (Act No 60 of 2003) - NO. R. 1072 in Government Gazette No. 32704 of 13 November 2009 (the Rules)

1.5.1 Petroleum Pipelines Act, 2003 (Act No 60 of 2003) (the Act)

Pursuant to section 4(b) of the Act, the *Energy Regulator must gather and store information relating to the construction, conversion and operation of petroleum pipelines, loading facilities and storage facilities.*

Pursuant to section 20(1) of the Act, *the Energy Regulator may impose licence conditions within the following framework of requirements and limitations:*

(e) *"The petroleum loading, pipeline and storage activities of vertically integrated companies may be required to be managed separately with separate accounts and data with no cross-subsidisation*".

(u) *Licensees must provide information necessary for the Energy Regulator to perform its functions*.

Pursuant to section 33 of the Act provides that *the Minister must, as appropriate, by notice in the Gazette make regulations regarding,*

(e) The rendering of information to the Energy Regulator.

Further, section 29 (1) provides that, for the purposes of this Act, the Energy Regulator may require any person to furnish to the Energy Regulator such information, returns or other particulars as may be necessary for the proper application of this Act.

(2) The Energy Regulator may require the accuracy of that information, return or furnished particular to be verified by way or oath/solemn declaration.

1.5.2 Regulations in terms of the Act

1.5.2.1 Third party access to storage facilities

Pursuant to Regulation 3 of the Regulations in terms of the Act:-
(1) A storage facility licensee must submit such information to the Energy Regulator as may be required by the Energy Regulator to determine uncommitted capacity and allow access to the applicable records and facilities by the Authority or its duly authorised representative, including consultants.

(2) The information referred to in sub-regulation (1) must—

a) be submitted via electronic mail, telefax, post and by hand in a format determined by the Authority;
b) be submitted on the last Thursday of every month or if the last Thursday falls on a public holiday, then on the preceding business day and must pertain to the requested capacity for the following 90 calendar days; and
c) Be published in a manner determined by the Authority within a reasonable time of receipt thereof.

(3) A storage facility licensee must, on the last Thursday of the month or if the last Thursday falls on a public holiday, then on the preceding business day, forward, electronically to the Authority the average actual utilisation for the preceding month for each storage facility.

(6) Storage facility licensees must lodge with the Authority their allocation mechanism for uncommitted capacity within six months of receipt of a license or, in the case of storage licences granted prior to the commencement of these regulations, within three months of these regulations coming into effect.

1.5.2.2 Rendering of information to the Energy Regulator

Pursuant to Regulation 6 of the Regulations in terms of the Act:-

(1) Licensees must submit to the Authority, in addition to any other information that may be required by the Authority, the following-

a) In the case of pipelines, the monthly volumes shipped by each customer;
b) In the case of storage facilities, average monthly volumes of petroleum stored belonging to the licensee and to third party customers, based on the measurement taken at the same time each day in that month as may be required by the Authority; and
c) In the case of loading facilities, the average monthly volumes of petroleum loaded and discharged.

(2) A licensee must submit electronically to the Authority on or before the end of May each year, the information contemplated in sub-regulation (1) for the preceding year ending on 31 March, together with-

a) a copy of any report made to an inspector in compliance with section 24 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);
b) the number of incidents of damage to licensed facilities caused by third parties and the resulting assessed damage costs; and
c) the encroachment on servitudes measured in square meters of a servitude.

(3) Licensees must report annually to the Authority on their liaison with local authorities regarding excavations by third parties that could damage licensees' pipelines.

1.5.2.3 Mechanisms to promote historically disadvantaged South Africans.

Pursuant to Regulation 8 of the Regulations in terms of the Act:-

(1) Applicants for licensees or existing licensees must, on an annual basis at the time of the anniversary of the license, provide information to the Authority regarding the commercial arrangements made for the participation of historically disadvantaged South Africans in the licensees' activities.

(2) The information contemplated in sub-regulation (1) must include-
the number of shareholders from historically disadvantaged background and their respective shareholding in the company that holds or will hold the license;

(a) the numbers and positions of historically disadvantaged South Africans who are members of the Board of Directors of the company that holds or will hold the license;
(b) the numbers and positions of historically disadvantaged South Africans who hold senior management positions in the company that holds or will hold the license;
(c) the value and percentage of subcontracted work to companies with more than 50% ownership by historically disadvantaged South Africans;
(d) proof of compliance with the Employment Equity Act, 1998 (Act No. 55 of 1998); and
(e) the plans for and actions taken to develop historically disadvantaged South Africans in the petroleum sector through training, procurement and enterprise development.

(3) The Authority must utilize the information provided in terms of sub-regulation (1) in such a manner so as to facilitate ownership, control or management of operations of petroleum pipelines, storage facilities and loading facilities by historically disadvantaged South Africans.

1.5.2.4 Rehabilitation of land

Pursuant to Regulation 9(1), a licensee must, not later than six months prior to termination, relinquishment or abandonment of licensed activities, submit to the Authority a plan for approval for the closure, removal and disposal, as the case may be, of all installations relating to such licensed activities.

Pursuant to Regulation 9(4), the Authority must require the licensee to provide financial security for purposes of rehabilitating land used in connection with a licensed activity and the composition and amount of such security.

Pursuant to Regulation 6(6), the Authority may at any time require written confirmation from a licensee that it is in compliance with the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

1.5.3 The Petroleum Pipelines Levies Act

Pursuant to section 2 (2), the levies imposed must be based on the amount of petroleum, measured in litres, delivered by importers, refiners and producers to inlet flanges of petroleum pipelines; and

1.5.4 National Energy Regulator Act and Functions of the Energy Regulator

Pursuant to section 4 (b) of the National Energy Regulator Act, 40 of 2004, the Energy Regulator must undertake the functions of the Petroleum Pipelines Regulatory Authority as set out in section 4 of the Act.

The powers and duties of Energy Regulator in terms of sections 4 of the Act include:-

The Energy Regulator must, as appropriate, in accordance with this Act,

(a) issue licences for-

(i) the construction and conversion of petroleum pipelines, loading facilities and storage facilities; and

(ii) the operation of petroleum pipelines, loading facilities and storage facilities;

(b) gather and store information relating to the construction, conversion and operation of petroleum pipelines, loading facilities and storage facilities;

(c) undertake investigations and enquiries into the activities of licensees;

(d) act as mediator or arbitrator in accordance with the provisions of this Act;

(e) consult, where necessary, with Government Departments and other bodies and institutions regarding any matter contemplated in this Act;

(f) set or approve tariffs and charges in the manner prescribed by regulation;

(g) monitor and take appropriate action, if necessary, to ensure that access to petroleum pipelines, loading facilities and storage facilities is provided in a non-discriminatory, fair and transparent manner;

(h) expropriate land or any right in or any right in respect of land, necessary for the exercise of a licensee's rights;

(i) promote competition in the petroleum pipeline industry;

(j) take decisions that are not at variance with published Government policy;

(k) perform any activity incidental to the performance of its duties;

(l) make rules in accordance with section 33(3); and

(m) exercise any power or perform any duty conferred or imposed on it under any law.

To fulfil these functions the Energy Regulator employs a range of regulatory tools, and NFI manual is one tool for collecting information required to perform its functions.

1.6 Purpose of the NFI Manual

The purpose of this NFI manual is therefore to prescribe and provide guidance to licensees in order to achieve uniformity in measurement, consistent and regular preparation and reporting of non financial information required by the Energy Regulator to perform its functions that are stated in section 1.5.4 of this NFI Manual.

Application of this NFI Manual will assist in bringing certainty to non-financial information regulatory reporting requirements provide an adequate information base required by the Energy Regulator, improve transparency in the regulatory process and enhance regulatory efficiency.

1.7 Applicability of the NFI Manual

The NFI Manual applies to all Petroleum Pipelines Industry entities regulated by NERSA. In this regard, the NFI is designed for use by:-

a. each regulated entity's regulatory personnel;
b. any other person appointed by the Energy Regulator to conduct the verifications/inspections envisaged by the Act;
c. NERSA regulatory staff.

1.8 Disclaimer

Inclusion of any item in this NFI Manual does not necessarily imply the Energy Regulator's acceptance, for its own decision-making of such information as supplied by the licensee.

Although application of this NFI manual is expected to lead to more complete/comprehensive submissions of the required NFI, there will still be certain well justified circumstances when additional information would be required in order to fully clarify a specific aspect of a matter under consideration by the Energy Regulator.

2 NFI Categories

The required information has been grouped in to two categories, namely static data and dynamic data.

2.1 Static information

Satic information is that NFI that has already been collected by NERSA (once off) from the licensees at the time of license application.

Licensees should therefore note that, after licensing, static information will not be collected again while it remains unhanged from what originally submitted.

The static information section is included in this Manual in order to amalgamate all NFI required/used or in the possession of NERSA in to one point of reference. This amalgamation makes the Manual a complete single source of reference of NFI in order to engender regulatory efficiency for all the users of the NFI Manual identified in section 1.7 of this Manual.

2.2 Dynamic information

Dynamic information will be collected from the licensees periodically such as; monthly, annually or on license anniversary date, as the case may be. The dynamic information is the core of the NFI Manual and will also be used internally by NERSA.

The dynamic information forms the backbone of the performance and compliance monitoring metrics to be derived from the NFI reports submitted by the licensees. Examples of these metrics to be derived by NERSA and published are shown in section 8 of this Manual.

3 Required Pipelines Facilities NFI and Submission Timeframes

3.1 Static NFI for Pipelines Facilities

3.1.1 Licensee Identification Information (Static)

Note: As already stated above all static information is only to be collected at time of a license application, meaning that it will not be collected by NERSA again, unless there is a change to it.

Information Required	Purpose (NERSA use)	Reporting Frequency	Report due date
Licensee name	Identification	Once off – lic. app	N/A
Profile (main business / production / facility)	Identification	Once off – lic. app	N/A
Contact person	Identification	Whenever changed	License condition
Designation	Identification	Whenever changed	License condition
Tel no.	Identification	Whenever changed	License condition
Fax no.	Identification	Whenever changed	License condition
Email address	Identification	Whenever changed	License condition
Postal address	Identification	Whenever changed	License condition
Physical address	Identification	Whenever changed	License condition

3.1.2 Pipeline Facility Information (Static)

Information Required	Purpose (NERSA use)	Reporting Frequency	Report due date
Description (name)	Identification	Once off	N/A
Licence number	Identification	Once off	N/A
Licence issue date	Identification	Once off	N/A
Licence Term (years)	Compliance	Once off	N/A
Licence status	Compliance	As changed	N/A
Amendment date/s	Compliance	As Changed	N/A
Tariff start date	Compliance	As Changed	N/A
Tariff end date (if applicable)	Compliance	As Changed	N/A
Licensed Capacity (m3/hour)	Identification	Once off	N/A
Length (Kilometres) of Pipeline	Identification & efficiency benchmarking	Once off	N/A
Diameter (Inches) of Pipeline	Identification & efficiency benchmarking	Once off	N/A
Average gradient of the pipeline	Identification & efficiency benchmarking	Once off	N/A
Number of pump stations	Identification & efficiency benchmarking	Once off	N/A
Servitudes measured in square meters	Identification & efficiency benchmarking	Once off	N/A

3.2 Dynamic NFI for Pipelines Injection Points

3.2.1 Monthly volumes shipped by each customer and Operating capacity

Information Required	Purpose (NERSA use)	Report interval	Preceding 12 Months ending	Report is due on or before
Injection Point (Facility)	Capacity available & efficiency	Monthly	31 March	31 May*
Shipper ID	Capacity available & efficiency	Monthly	31 March	31 May*
Monthly volumes shipped by Shipper	Capacity available & efficiency	Monthly	31 March	31 May*
Planned downtime (days)	Capacity available & efficiency	Monthly	31 March	31 May*

*Although the Regulations provide for this annual information be reported by no later than the date shown on the last column, NERSA is receiving this information on a monthly basis to more effectively perform its functions.

3.2.2 Occupational Health and Operational Safety Information

Information Required	Purpose (NERSA use)	Reporting Frequency	Preceding 12 Months ending	Report is due on or before
OH&SA section 24 events[1]	Operational safety	Annually	31 March	31 May
Number of incidents of damage to licensed facilities caused by 3rd parties	Operational safety	Annually	31 March	31 May
Assessed damages resulting from damages by 3 parties (Rands)	Operational safety	Annually	31 March	31 May
Encroachment on servitudes (square metres of servitude)	Operational safety	Annually	31 March	31 May

3.2.3 Participation of Historically Disadvantaged South Africans Information

The Regulations requires that the Energy Regulator must use this information in such a manner so as to facilitate ownership, control or management of operations of petroleum pipelines, storage facilities and loading facilities by HDSA.

Information Required	Purpose (NERSA use)	Reporting Frequency	Report due date
Commercial arrangements made for participation of HDSA in licensee's activities	BBBEE facilitation	Annually	On each License anniversary date
Number of shareholders from HDSA background	BBBEE facilitation	Annually	On each License anniversary date
Respective % shareholding (ownership) of the shareholders from HDSA background	BBBEE facilitation	Annually	On each License anniversary date
Number Board Members from HDSA background	BBBEE facilitation	Annually	On each License anniversary date
Number of HDSA holding senior management positions	BBBEE facilitation	Annually	On each License anniversary date

[1] (a) Incident in which, or in consequence of which any person dies, becomes unconscious, suffers the loss of a limb or part of a limb or is otherwise injured or becomes ill to such a degree that he is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14days either to work or to continue with the activity for which he was employed or is usually employed; (b) Incident in which or in consequence of which a major incident occurred; (c)(i) Incident in which or consequence of which the health or safety of any person was endangered and where a dangerous substance was spilled; (c (ii) Incident in which or consequence of which the health or safety of any person was endangered and where the uncontrolled release of any substance under pressure took place; (c)(iii) Incident in which or consequence of which the health or safety of any person was endangered and where machinery or any part thereof fractured or failed resulting in flying, falling or uncontrolled moving objects; (c)(iv) Incident in which or consequence of which the health or safety of any person was endangered and where machinery ran out of control, shall, within the prescribed period and in the prescribed manner, be reported to an inspector by the employer or the user of the plant or machinery concerned, as the case may be

Information Required	Purpose (NERSA use)	Reporting Frequency	Report due date
Positions of HDSA in senior management positions	BBBEE facilitation	Annually	On each License anniversary date
Value of subcontracted work to companies with more than 50% ownership by HDSA	BBBEE facilitation	Annually	On each License anniversary date
% of value of subcontracted work to companies with more than 50% ownership by HDSA	BBBEE facilitation	Annually	On each License anniversary date
Proof of compliance with the Employment Equity Act, 1998 (Act No. 55, 1998)	BBBEE facilitation	Annually	On each License anniversary date
Plans for/to develop HDSA • Training • Procurement • Enterprise development	BBBEE facilitation	Annually	On each License anniversary date
Actions taken to develop HDSA • Training • Procurement • Enterprise development	BBBEE facilitation	Annually	On each License anniversary date

4 Required Loading Facilities NFI and Submission Timeframes

4.1 Static NFI for Loading Facilities and Off-Loading/Discharge Facilities

4.1.1 Licensee Identification Information (Static)

Same as section 3.1.1 for pipeline licensee identification information

4.1.2 Loading & offloading Facility Information (Static)

Information Required	Purpose (NERSA use)	Reporting Frequency	Report due date
Site information (GIS)	Identification	Once off	N/A
Location	Identification	Once off	N/A
Licence number	Identification	Once off	N/A
Licence issue date	Identification	Once off	N/A
Licence Term (years)	Compliance	Once off	N/A
Licence status	Compliance	As changed	N/A
Amendment date/s	Compliance	As Changed	N/A
Tariff start date	Compliance	As Changed	N/A
Tariff end date (if applicable)	Compliance	As Changed	N/A
Licensed Capacity (m3/hour)	Identification	Once off	N/A
Diameter (Inches) of Pipeline	Identification & efficiency benchmarking	Once off	N/A

4.2 Dynamic NFI for Loading & Off-Loading/Discharge Facilities

4.2.1 Monthly volumes loaded and discharged/off-loaded

Information Required	Purpose (NERSA use)	Reporting Frequency	Preceding 12 Months ending	Report due on or before
Licensed Facility Name	Identification	Once off	N/A	
Location (Address)	Identification	Once off	N/A	
Site Location (GIS)	Identification	Once off	N/A	
Unplanned downtime (days)	Capacity available & efficiency	Annually of Monthly data	31 March	31 May*
Monthly volumes discharged/product	Capacity available & efficiency	Monthly	31 March	31 May*
Monthly volume received/product	Capacity available & efficiency	Monthly	31 March	31 May*
Planned Outages/ downtime (# of days)	Capacity available & efficiency	Monthly	31 March	31 May*

*Although the Regulations provide for this annual information be reported by no later than the date shown on the last column, NERSA is receiving this information on a monthly basis to more effectively perform its functions.

4.2.2 Occupational Health and Operational Safety Information

Same information as that in section 3.2.2 under Pipelines

4.2.3 Participation of Historically Disadvantaged South Africans Information

Same information as that in section 3.2.3 under Pipelines

5 Required Storage Facilities NFI and Submission Timeframes

5.1 Static NFI for Storage Facilities

5.1.1 Licensee Identification Information (Static)

Same as section 3.1.1 for pipeline licensee identification information

5.1.2 Storage Facility Information (Static)

Information Required	Purpose (NERSA use)	Reporting Frequency	Report Due Date
Licensed Facility Name	Identification	Once off	N/A
Location (Address)	Identification	Once off	N/A
Site Location (GIS)	Identification	Once off	N/A
Licence Number	Identification	Once off	N/A
Licence Issue Date	Identification	Once off	N/A
Licence Term (years)	Compliance	Once off	N/A
Licence status	Compliance	As changed	N/A
Amendment date/s	Compliance	As Changed	N/A
Tariff start date	Compliance	As Changed	N/A
Tariff end date (if applicable)	Compliance	As Changed	N/A
No. of Tanks	Identification	Once off	N/A
Facility Intake modes	Security of supply	Once off	N/A
Facility Intake rate (m3/hr) per mode	Security of supply	Once off	N/A
Facility Discharge Modes	Security of supply	Once off	N/A
Facility Discharge Rate (m3/hr) per mode	Security of supply	Once off	N/A
No. Of Gantries (Road)	Security of supply	Once off	N/A
No. Of Gantries (Rail)	Security of supply	Once off	N/A

5.1.3 Tank Capacity/Design Capacity Information (Static)

Information Required per Tank	Purpose (NERSA use)	Reporting Frequency	Report due date
Tank Number	Identification	Once off	N/A
Individual Tank Identity	Identification	Once off	N/A
Individual Tank Type	Identification	Once off	N/A
Individual Tank Operational Capacity (m3)	Identification	Once off	N/A
Products stored in each tank (Multiple/Specific)	Identification	Once off	N/A
Planned downtime (days)	Capacity available	Monthly	N/A
Unplanned downtime (days)	Capacity available	Monthly	N/A
Nameplate Rating (m3)	Capacity available	Once off	N/A
Safe operating capacity (m3)	Capacity available, efficiency & safety	Once off	N/A
Unpumpable stock (m3)	Capacity available	Once off	N/A

5.1.4 Product Information (Static)

Note: Holding both codes (for DoE and NERSA) here will allow for easier data exchange in the future

Information Required/ Description	Purpose (NERSA use)	NERSA Product code	Reporting Frequency	Report due date	DoE Product Code
Petrol 93 Unleaded	Security of supply		Once off	N/A*	
Petrol 95	Security of supply		Once off	N/A*	
LRP	Security of supply		Once off	N/A*	
Diesel 0.05% Sulphur	Security of supply		Once off	N/A*	
Diesel 0.005% Sulphur	Security of supply		Once off	N/A*	
Illuminating Paraffin	Security of supply		Once off	N/A*	
Jet fuel	Security of supply		Once off	N/A*	
Synjet	Security of supply		Once off	N/A*	
JetA1	Security of supply		Once off	N/A*	
AVTUR	Security of supply		Once off	N/A*	
Crude	Security of supply		Once off	N/A*	
LP Gas	Security of supply		Once off	N/A*	

*updated whenever there are new products/specs

5.2 Dynamic NFI for Storage Facilities

5.2.1 Monthly volumes of petroleum stored for licensee and 3rd party customers

Information Required	Purpose (NERSA use)	Reporting Interval	Preceding 12 Months ending	Report due on or before
Opening Stock (m3)	Uncommitted capacity	Once off	31 March	Once off
Closing Stock (m3)	Uncommitted capacity	Monthly	Monthly	Monthly
Monthly thruput volume of petroleum stored belonging to licensee	Capacity available & efficiency	Monthly	31 March	31 May*
Monthly thruput volume of petroleum stored belonging to	Capacity available & efficiency	Monthly	31 March	31 May*

Information Required	Purpose (NERSA use)	Reporting Interval	Preceding 12 Months ending	Report due on or before
3rd party				
Planned downtime (days)	Capacity available & efficiency	Monthly	31 March	31 May*
Unplanned downtime (days)	Capacity available & efficiency	Monthly	31 March	31 May*

*Although the Regulations provide for this annual information be reported by no later than the date shown on the last column, NERSA is receiving this information on a monthly basis to more effectively perform its functions.

5.2.2 Third party access to storage facilities

Information Required	Purpose (NERSA use)	Reporting Frequency	Report due date
Request received for capacity/ contractual commitments by a 3rd Party?	3rd party access, utilisation & efficiency	Monthly	Last Thursday of every month*

* where the last Thursday falls on a public holiday, then the preceding business day

5.2.3 Occupational Health and Operational Safety Information

Same information as that in section 3.2.2 under Pipelines

5.2.4 Participation of Historically Disadvantaged South Africans Information

Same information as that in section 3.2.3 under Pipelines

6 Measurement/Calculation of Required NFI

6.1 Units of measurement

The units of measurement shall be metric

6.2 Measurements and calculations

This section defines those items which are subject to varying measurement approaches so that NERSA and the regulated industries adopt a standard measure.

The items to be defined here are drawn from those required to be reported as per sections 3, 4, and 5 of this Manual. These items and standard measurement approach to be adopted are as follows:-

1 Average gradient of a pipeline = as per Supplier's Specification Sheet

2 Design capacity = Nameplate Rating

3 Operational capacity/Facility Availability = as per Operational Data

3.1 Storage tank operational capacity = Design capacity minus tank bottom minus head stock

3.2 Number of days of tank outage (i.e. temporary offline) for the reporting month = days planned and unplanned unavailability of tankage reported for each licensed tank

3.3 Storage tank operational capacity for the reporting monthly period (m^3) = Storage tank operational capacity x number of days in the month storage tank operational capacity is available (i.e. excluding the days of tank outage)

3.4 Tank farm storage operational capacity for the reporting month (m^3) = Storage tank operational capacity for the reporting month x number of licensed storage tanks on that tank farm

4 Overall Storage Facilities Stock Levels

4.1 Actual MONTH closing stock level(m^3) = The closing stock (for the licensee and all other parties) at the facility as measured by the licensee

4.2 Maximum DAILY closing stock level (m^3) = This is the physical closing daily maximum stock level reached during the course of the month (licensee and all other parties)

4.3 Average DAILY closing stock levels (m^3) = The average daily closing stock level, i.e. Daily closing stock averaged over the course of the month (licensee and all other parties)

4.4 Minimum DAILY closing stock level (m^3) = The physical minimum daily stock level reached during the course of the year, (licensee and all other parties)

5 Total Stock Movements (All Parties)

5.1 Total Volume Received (m^3) = The volume of product received into the storage facility summed up over the course of the month(licensee and all other parties)

5.2 Number of batches received = The number of loads of product received into the storage facility summed up over the course of the month, e.g. A single compartment road or rail tanker load would constitute a batch, as would a single slug received through the pipeline. (licensee and all other parties, the size of the batch is not considered)

5.3 Total volume dispatched (m^3) = The volume of product dispatched from the storage facility summed up over the course of the month (licensee and all other parties)

5.4 Number of batches dispatched = The number of loads of product dispatched from the storage facility summed up over the course of the month, e.g. A single compartment road or rail tanker load would constitute a batch, as would a single slug dispatched through the pipeline. (licensee and all other parties, the size of the batch is not considered)

6 3rd Parties Stock Levels

6.1 Month opening stock level (m^3) =The opening product stock level (all other parties excluding the licensee and "hosted" parties) at the beginning of the month. This figure is typed in for the month of March only, and is carried over as the closing stock from the previous months for subsequent months

6.2 Actual MONTH closing stock level (m^3) = The closing stock (all other parties excluding the licensee and "hosted" parties) at the facility as measured by the licensee. This figure is carried through as the opening stock for the next month

6.3 Maximum DAILY stock level reached (m^3) = This is the physical maximum stock level reached during the course of the month (all other parties excluding the licensee and "hosted" parties)

6.4 Average DAILY closing stock levels (m^3) = The average daily closing stock level, i.e. Daily closing stock averaged over the course of the month (all other parties excluding the licensee and "hosted" parties)

6.5 Minimum DAILY stock level reached (m^3) = The physical minimum stock level reached during the course of the year, (all other parties excluding the licensee and "hosted" parties)

7 3rd Parties Stock Movements

7.1 Total Volume Received (m^3) = The volume of product received into the storage facility summed up over the course of the month (all other parties excluding the licensee and "hosted" parties)

7.2 Number of batches received = The number of loads of product received into the storage facility summed up over the course of the month, e.g. A single compartment road or rail tanker load would constitute a batch, as would a single slug received through the pipeline. (all other parties excluding the licensee and "hosted" parties, the size of the batch is not considered)

7.3 Total volume dispatched (m^3) = The volume of product dispatched from the storage facility summed up over the course of the month (all other parties excluding licensee and "hosted" parties)

7.4 Number of batches dispatched = The number of loads of product dispatched from the storage facility summed up over the course of the month, e.g. A single compartment road or rail tanker load would constitute a batch, as would a single slug dispatched through the pipeline. (all other parties, excluding the licensee "hosted" parties, the size of the batch is not considered)

8 Average actual utilisation for the preceding month for a storage facility/Overall Storage Facility Utilisation Indicators (Calculated)

8.1 Facility capacity turnover rate (x) = The number of times the capacity of the facility has been "emptied" and "filled" over the course of the month. This calculated as the throughput divided by the total capacity (for each product in the product spreadsheets and for the storage facility in the summary sheet)

8.2 Facility total volume throughput (m^3) = The total volume handled at the facility over the course of the month, calculated for each product in the product sheets and for the storage facility in the summary sheet. Throughput is determined from the measured process data.

8.3 Facility days availability percentage (%) = The number of days the total capacity of the storage facility was available for storage, as a percentage of the number of days in the month

8.4 Facility capacity-days availability (%) = percentage amount of days available during the period

8.5 Facility batch ratio (receipts/dispatch) = The ratio of the number of batches received to the batches dispatched

8.6 Average batch size of receipts (m^3) = Calculated as the volume of products received divided by the number of batches received

8.7 Average batch size of dispatches (m^3) = Calculated as the volume of products dispatched divided by the number of batches dispatched

8.8 Average stock retention time (stock average) (days) = The average stock retention time, calculated as the daily stock average divided by the throughput and multiplied by the number of days

8.9 Average stock retention time (capacity) (days) = The average stock retention time, calculated as the total capacity divided by the throughput x 30

8.10 Throughput = tank volume x turnovers

9 3rd Parties Storage Facility Utilisation Indicators (Calculated)

9.1 3rd Parties total volume throughput(m^3) = The total volume handled for all other parties, excluding the licensee and "hosted" parties, over the course of the month, calculated for each product in the product sheets and for the storage facility in the summary sheet

9.2 3rd Parties average batch size of receipts (m^3) = The volume for 3rd parties/The number of batches of product received for all other parties, excluding the licensee and "hosted" parties

9.3 3rd Parties average batch size of dispatches (m^3) = The number of batches of product dispatched for all other parties, excluding the licensee and "hosted" parties

9.4 3rd Parties throughput as % of overall facility throughput (%) = 3rd parties total volume throughput as a percentage of the overall facility throughput

10 Uncommitted capacity of storage facility = means capacity determined by the Energy Regulator that is not required to meet contractual obligations

10.1 Average monthly volumes of petroleum stored - based on measurement taken at the same time each day in that month as may be required by the Energy Regulator. The Energy regulator requires that the same time per day be used as a measure in line with each company's own cut-off times of each business day that the storage facility is operational. Average monthly volume is the sum of these daily measurements for the entire reporting month/days in the month

10.2 Pipeline throughput[2] = actual volume of petroleum passing through a pipeline during a month

10.3 Average monthly volumes of petroleum loaded = Petroleum volume loaded over a month

10.4 Average monthly volumes of petroleum discharged = Petroleum volume discharged over a month

11 HDSA ownership, control and participation

11.1 HDSA Ownership (%) - measured by legal and effective black shareholding, through voting rights, rights to economic interest and sustainability as a % of the aggregate value of the equity of the various entities that hold the operating assets of the South African oil industry. The aggregate value of the equity will be based on the asset values as per the audited accounts of the entities concerned." Where a license uses Regulatory Asset Base (RAB) values that are higher that statutory accounts asset values, the higher RAB shall be used.

11.2 HDSA Control - Percentage HDSA in directorship positions (both executive & non-executive) as a percentage of total directorship positions of the licensed entity

11.3 Percentage (%) of subcontracted work to companies with more than 50% ownership by HDSA - procurement spend on 50% HDSA-owned sub-contractors as a % of total procurement spend by the licensed entity

11.4 Plans for and actions taken to develop HDSA

11.4.1 Training (capacity building) – Rands spend on skilling of black employees against licensed entity total, Number of learnership opportunities for black employees against licensed entity total, Number of training opportunities for black employees against licensed entity total

11.4.2 Procurement – HDSA spend and quantified effective benefit of preferential payment terms to BEE suppliers, credit terms of HDSA versus others, preferred supplier status

11.4.3 Enterprise development – financing, strategic partnerships, supportive & enabling environment created for business success

11.4.4 Compliance with Employment Equity Act - Employment Equity reports submitted to the Department of Labour for:- Focus on HDSA's when identifying candidates for overseas placement and training; identifying a talent pool and fast tracking it; ensuring inclusiveness of gender; implementing mentorship programmes and setting and publishing demanding targets;

2 Actual operational capacity on an oil pipeline can be influenced by suck factors type of product, product mix, type of batching and pipeline configurations. For example when heavy crude oil is transported on a pipeline, the capacity of the pipeline is reduced. Alternatively, when lighter crude oil or refined products are transported a pipeline has more capacity.

7 Administrative Matters

7.1 Responsibility for NFI Submission and Solemn Declarations

The NFI must be submitted to the Energy Regulator by a responsible official appointed from time to time and duly authorised by the licensee to submit this information to the Energy Regulator. The Energy Regulator may require that this duly authorised responsible official verify the accuracy of the NFI information being submitted by way of oath/solemn declaration.

The NFI must be submitted electronically, and in the format prescribed in this NFI Manual, to the Energy Regulator. In exceptional circumstances, the Energy Regulator may provide for non-electronic submissions, allowed by the Regulations, to cater for a licensee without electronic submission capabilities or when original hard copies are required by the Energy Regulator.

7.2 Records

Each regulated entity must keep records supported by detailed information as will permit ready identification, examination, analysis and verification of all facts thereto.

The records shall be filed in such a manner as to be readily accessible for examination by authorised representatives of the Energy Regulator.

These records must be retained by the licensee for at least 5 years.

7.3 Publication and Confidentiality

section 8(9) (a), section 10(2) of the National Energy Regulator Act and section 29 of Petroleum Pipelines Act contain specific provisions on confidentiality of information.

The Energy Regulator will publish the non-financial information submitted by the licensees on its on the Energy Regulator's website, but would exclude certain information contemplated in Sections 8(9)(a) and 10(2) of the National Energy Regulator Act and section 29 of the Petroleum Pipelines Act, determined to be confidential by Energy Regulator. It is the responsibility of the regulated entity to promptly notify the Energy Regulator of information that should not be in the public domain by clearly marking the relevant information as such. Regulated entities are also encouraged to publish the non-confidential NFI on their respective websites.

7.4 Effective Date and Implementation Costs of the NFI Manual

The implementation phase will be for a period of at least three years starting from 01 April 2016. This 3 (three) year period is to enable the licensees to prepare, transition and start reporting according to this NFI Manual for all non-financial information submitted to NERSA.

The Energy Regulator may also approve a phased implementation to provide for any other justifiable circumstances that may warrant such an approach. Licensees are required to make appropriate arrangements to comply with the prescript and guidance contained in this NFI Manual.

Costs related to reporting in accordance with this NFI Manual should be treated in a similar manner and recovered in similar way as the licensee's other operating and maintenance expenses for the licensed activity.

Licensees are allowed to report on the NFI using Ms Excel spreadsheet for a period of at least 3 years (implementation phase) and thereafter the ER may consider using an automated system.

7.5 Review and Modification of the NFI Manual

The Energy Regulator will conduct an initial review of the NFI Manual after 3 years from the effective date (1 April 2016).

Subsequent reviews will be done every 5 years to ensure that the contents of the NFI Manual reflect the legislative and regulatory circumstances existing at the time of the review.

The Energy Regulator also recognizes that special circumstances may arise that may necessitate ongoing changes, perhaps more frequent than the envisaged 5 years formal review cycle. This provision would therefore not preclude on-going incorporation by the Energy Regulator of justifiable changes that are considered necessary to immediately capture clarity, transparency and regulatory efficiency benefits.

The Energy Regulator will give decisions on the interpretation of the various clauses of NFI, but any party will be entitled at any stage to take decisions of the Energy Regulator on review or appeal as contemplated in the enabling legislations.

8 Appendix A: Sample of Statistics/Metrics from the info submitted

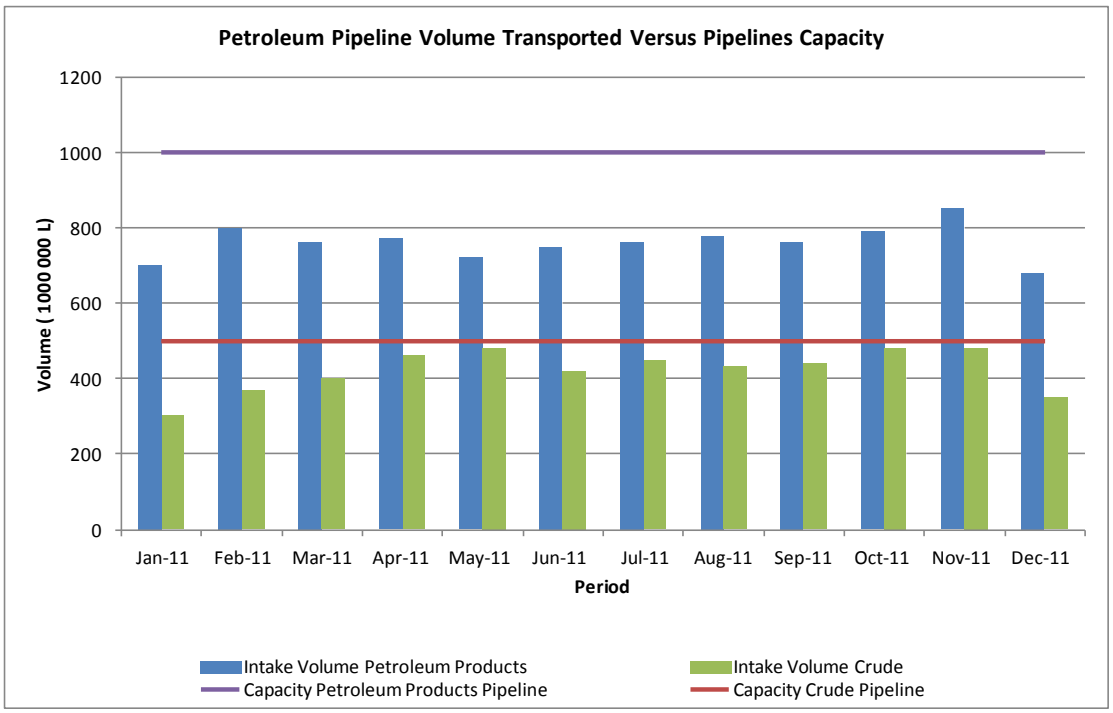
Examples of analysis that Energy Regulator will conduct as well as examples of the resultant Metrics/Statistics to be produced with a view to publication of non-confidential version of these outputs of Metrics/Statistics are as follows:-

8.1 Monthly Average Volumes and Storage uncommitted capacity

8.1.1 Pipelines Average Volumes Shipped Against Capacity

The Energy Regulator will publish information submitted by licensees on average monthly volumes shipped and the pipeline capacity. The aggregate of this information will be published rather than individual customer levels. This will include:-

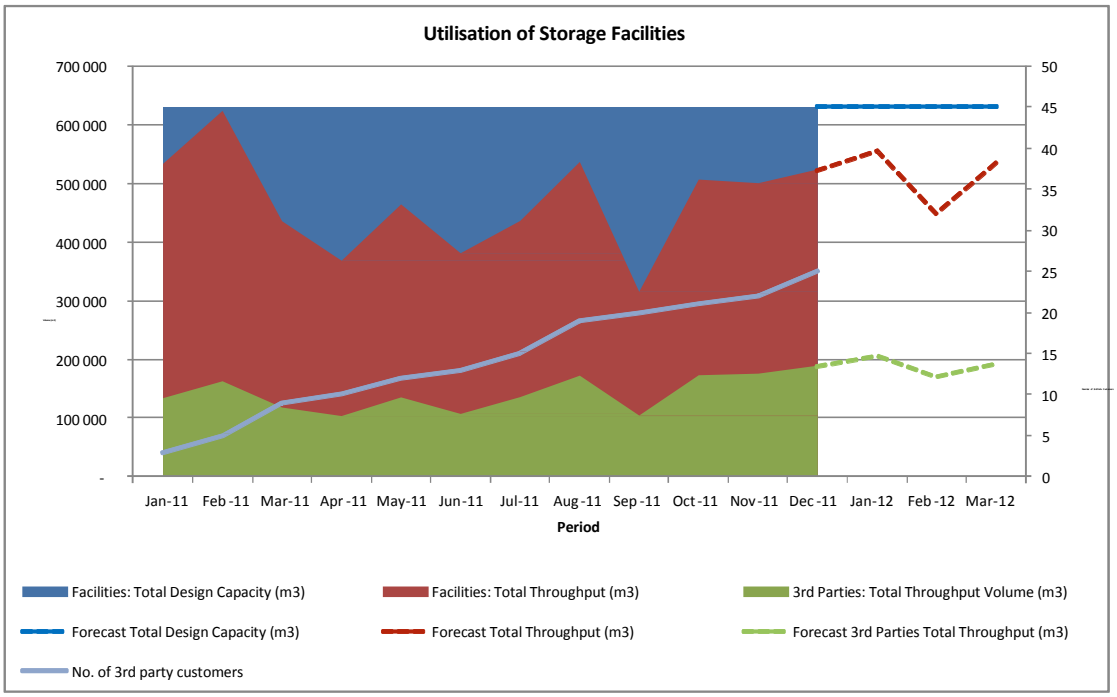
Bar graph showing volumes shipped actual/historical for an appropriate period as determined from time to time by the Energy Regulator. The following is an example of this analysis and publication based on hypothetical numbers and scenario:-



8.1.2 Storage uncommitted capacity for 3rd party access

For storage facilities the Energy Regulator will publish information submitted by licensees to determine uncommitted capacity. The aggregates of this information will be published rather than individual licensees. This will include:-

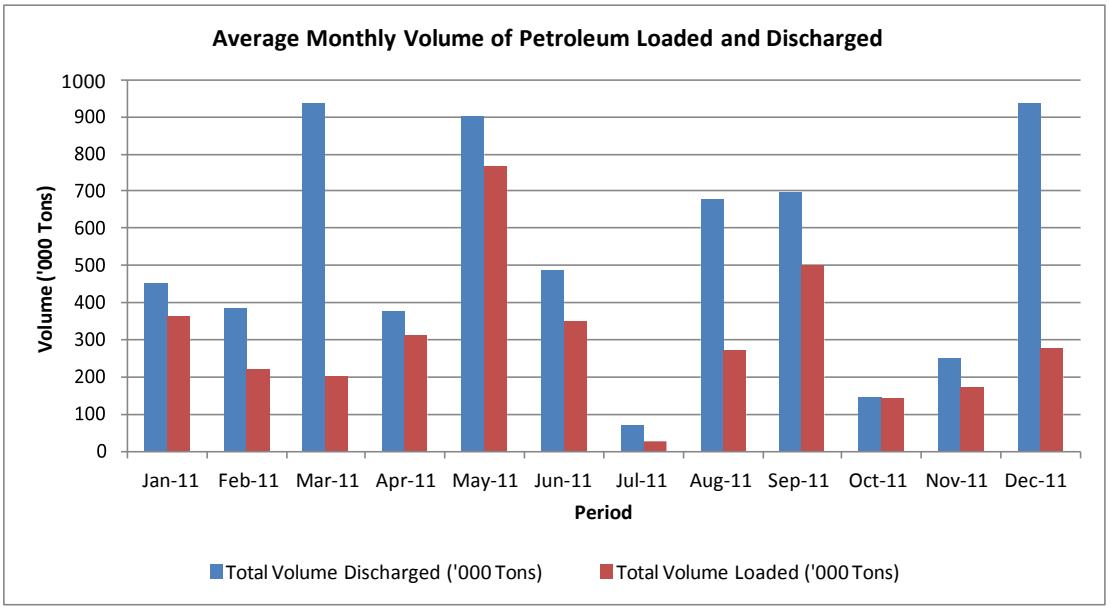
Stacked time-series graph showing nameplate capacity, versus operational capacity. This stacked graph will also show uncommitted capacity (monthly actual/historical and 90 days forecast) as per the following example:-



Note: Graph can be adjusted to show first, at its bottom, the tank-bottom/headstock, and the above includes a line graph showing historical number of 3rd party customers

8.1.3 Loading Facility Average Loaded and Discharged

The Energy Regulator will publish information submitted by licensees on average monthly volumes loaded and discharged. The aggregates of this information will published rather than that of an individual licensee/facility. The following is an example:-



8.2 Occupational Health and Safety Performance Indicators

Occupational Health and Safety Performance Indicators - created by analysing the mandatory information licensees submit to the Energy Regulator. These indicators evaluate the effectiveness of health and safety programs among licensees regulated by NERSA. The results are tabulated into a report that reflects aggregates of all NERSA regulated entities as a group and not as individual licensed entities.

The following is an example of aggregated Information, by licensed activity, and year to year totals for the industry to be published in tabular and graph format

8.2.1 Total Petroleum Pipeline, Industry Occupational Health & Safety

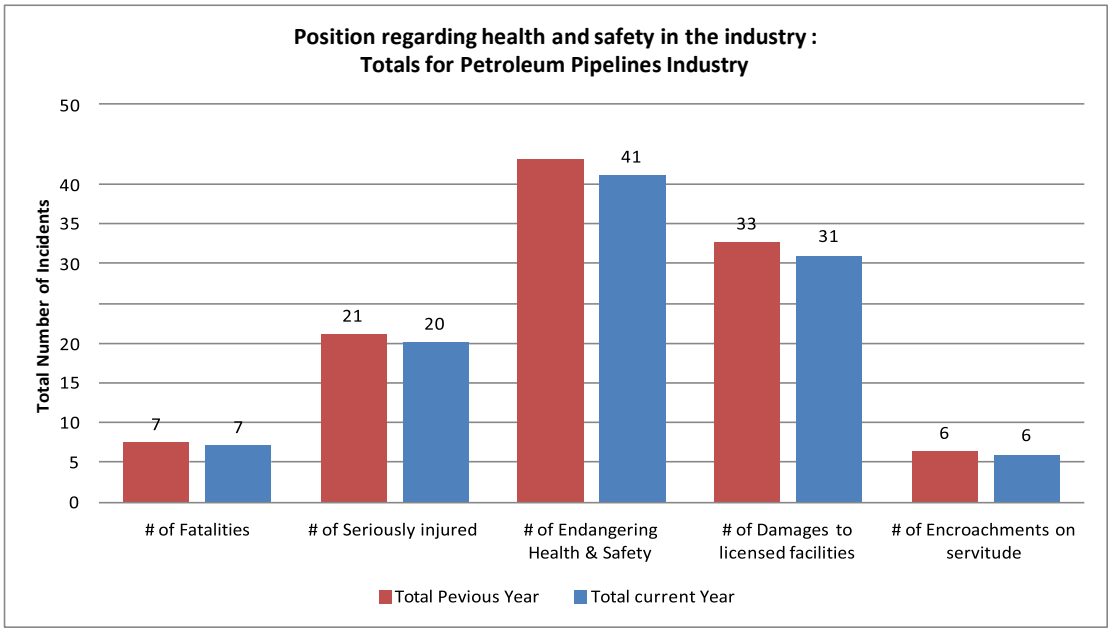
Tabular Format of Occupational Health and Safety Report (by activity and time-series)

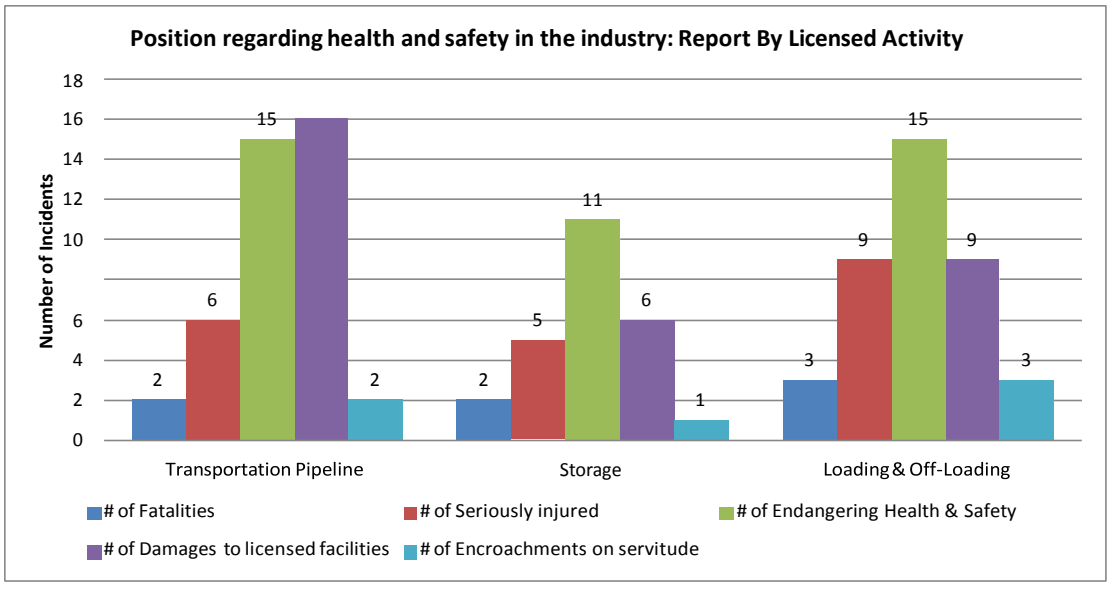
Type of Incident	PPL	Storage	Loading	Total
Fatality	0	0	0	0
Serious Injury - section 24(1)(a) excluding fatality	0	0	0	0
Endangering Health & Safety incidents (Sum of the following) Dangerous substance was spilled Uncontrolled release of any substance under pressure Machinery or any part thereof fractured or failed resulting in flying, falling or uncontrolled moving objects Machinery ran out of control	0	0	0	0
Damages to licensed facilities (Sum of the following) No. of incidents of damage caused by 3rd parties Excavations by 3rd parties that could damage licensees' pipelines	0	0	0	0

Encroachment on servitude No. of incidents of encroachments	0	0	0	0
Total Incidents (excludes M^2 encroached)	**0**	**0**	**0**	**0**
Square metres of servitude encroached	0	0	0	0
Rand Value of Assessed Damages Caused on 3rd Parties on Licensed Facilities	R0	R0	R0	Ro

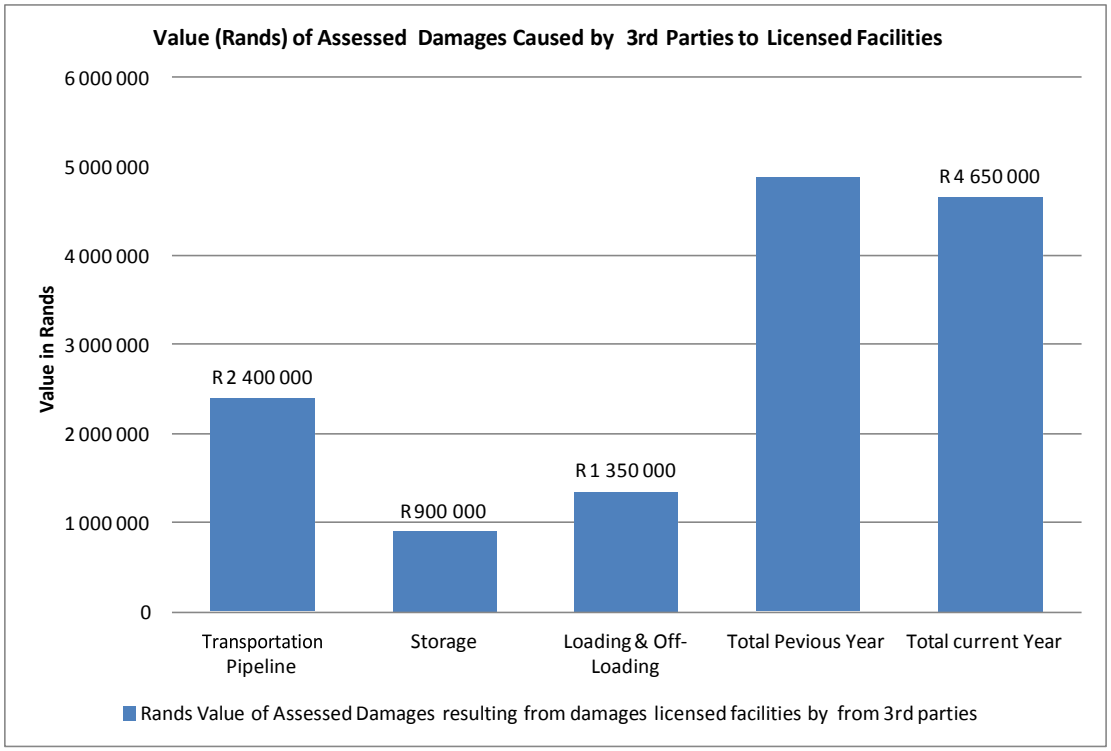
Graphs Format of Occupational Health and Safety Report (by activity and time-series)

The following are examples of graphs for total Petroleum Pipelines Industry:-





Final version: 27 November 2013
Approval Date: 26 March 2015
Effective Date: 01 April 2016

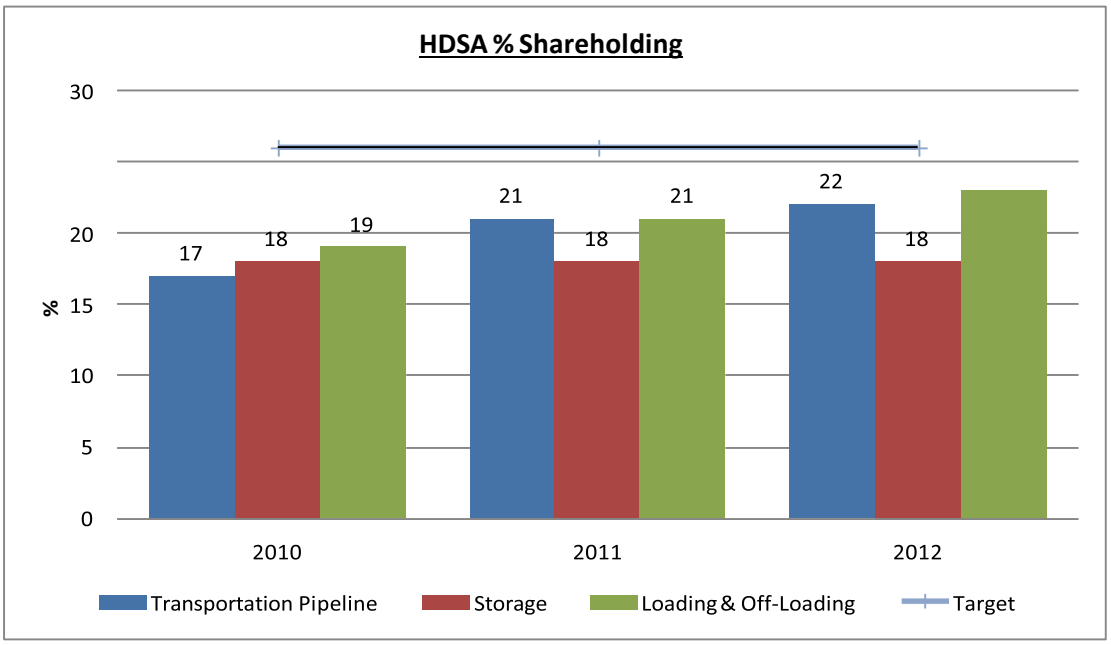


8.3 Promotion of historically disadvantaged South African

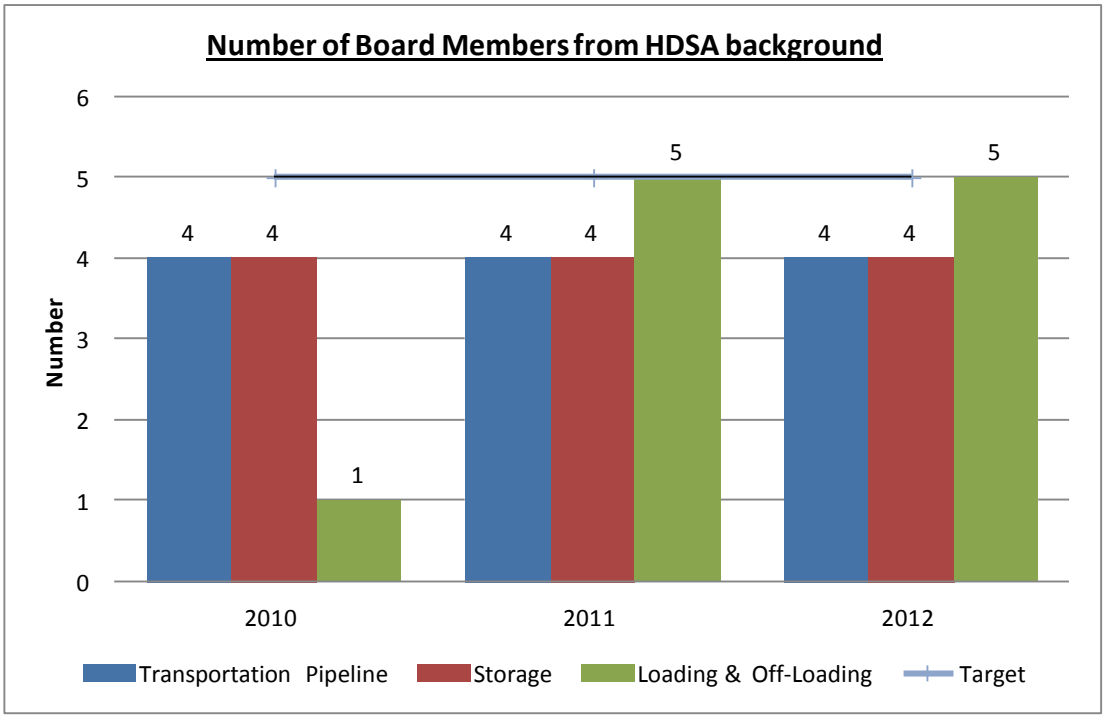
These indicators evaluate the progress among licensees regulated by NERSA in promoting the participation of HDSA. The results are tabulated into a report that reflects aggregates of by regulated activity of all NERSA regulated entities as a group and not as individual licensed entities.

Line graph (or table) showing number of historically disadvantaged South African (against Charter targets) (historical and forecast). The following graphs are an example

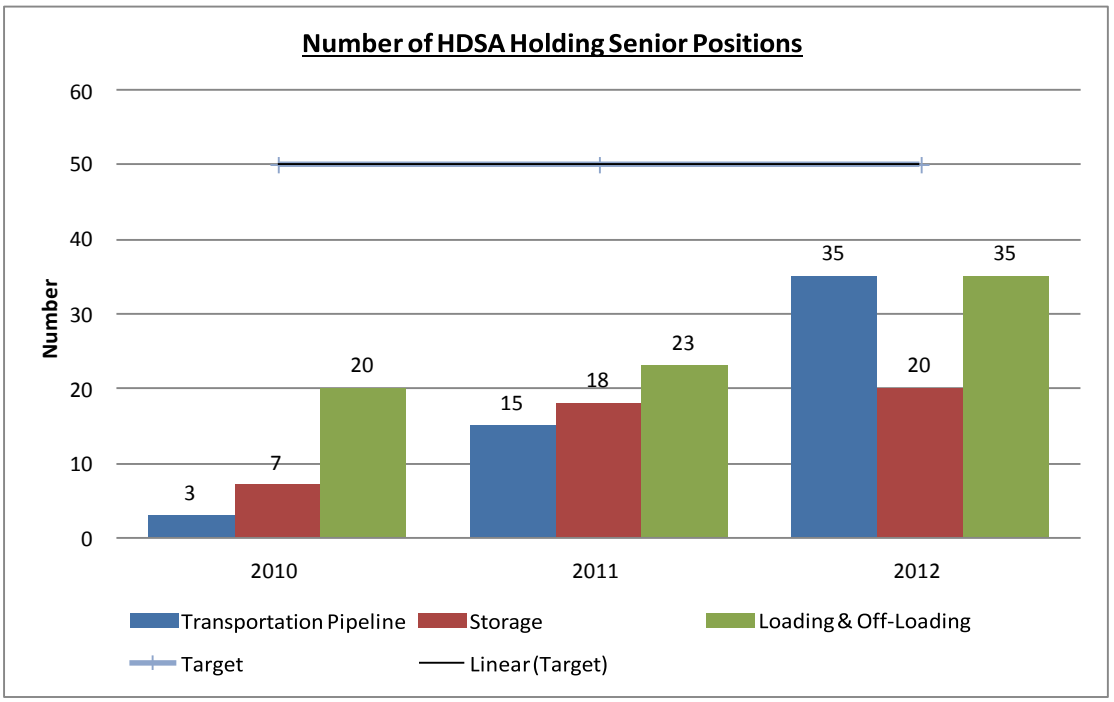
8.3.1 % shareholding held by HDSA



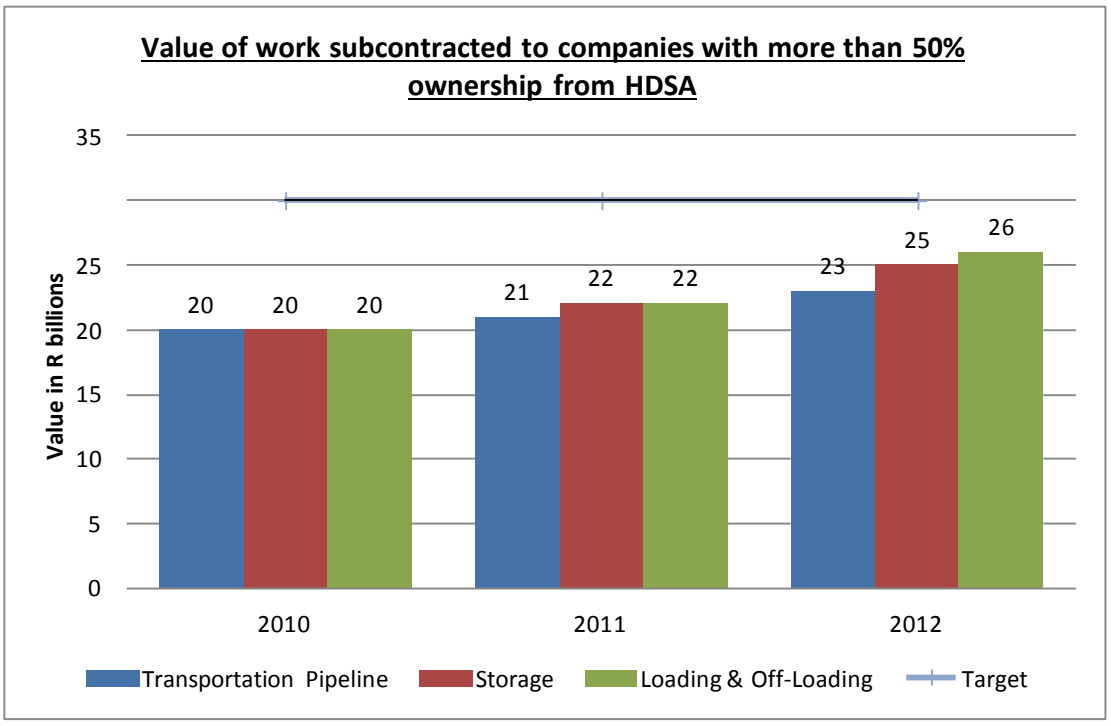
8.3.2 Number Board Members from HDSA background



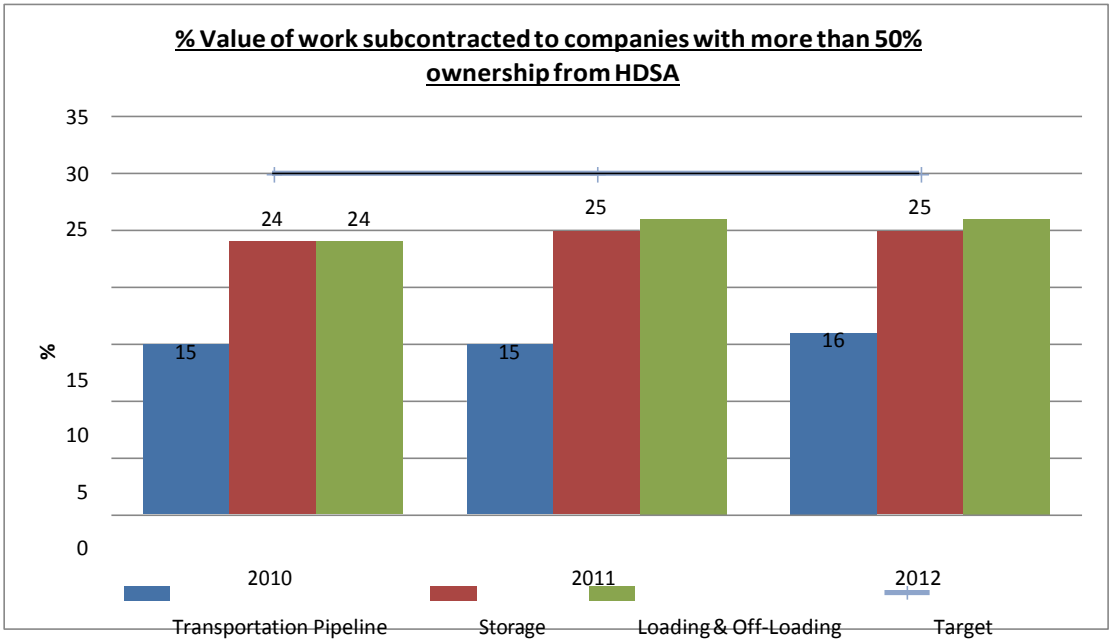
8.3.3 Number of HDSA holding senior management positions



8.3.4 Value of work subcontracted to >50% HDSA-owned companies



8.3.5 % value of work subcontracted to >50% HDSA-owned companies



8.4 Service quality standards

Time series Table (or graphs) showing service quality standards against Energy Regulator targets

- Total number of complaints received.
  - Type of complaints received:
    - Pricing errors
    - Invoice errors
    - Service disruption
      - Numbers of disruptions reported
      - Total number of customers affected by all disruptions reported
      - Shortest duration (hours or days) of disruption
      - Longest duration (hours or days) of disruption
      - Average time period of disruption (days or hours?) per disruption per customer
    - Total
- Average time taken to resolve complaints/disputes:
  - For each type of complaint
  - Total
- Non-compliance notices sent to licensee:
  - Number sent out
  - Number resolved

- Disputes:
    - Number declared
    - Number resolved
    - Number outstanding
    - Number under arbitration

8.5 Data items for assessment of performance

Time series table (or graphs) showing total number of employees, average number of people employed, hours worked etc.

The following NFI metrics use diameter of pipelines and length . The computation involves both fin and non-fin metrics

- OPEX/[∑ Pipeline Diameter X Length(kms) of Pipeline]
- Net Utility Property, Plant and Equipment (per RRM Vol 4) / Length(kms) of pipeline
- Capacity factor = the ratio of actual output/throughput to nameplate capacity
- Other measures that combined financial and non-financial information

8.6 Construction Work In Progress

For each project

- Construction Project Name/License Number (from static info)
- Construction period allowed (# of months standard from Static licensing info)
- Construction period elapsed from start date stated in the license condition
- Key milestones (ROD, Construction, Commissioned?, etc)
- Costs information
    - Approved project costs/value
    - Project costs to date
    - Forecast Final Cost (FFC)
- % of completion achieved (in bar chart format on P249) based on project GANTT chart.
- Total new capacity addition/transferred to operation

Aggregates for all licensed construction projects for the reporting period per licensee

- # of completed construction
- # of constructions in progress
- # of constructions not started
- # of constructions on hold
- # of constructions licenses revoked

Aggregates for all licensed construction projects for the reporting period for all the licensees

9 Appendix B: Reporting Templates

9.1 Consistency of Numbering and Coding Convention

The Energy Regulator already issued the Regulatory Reporting Manuals (RRM) for the collection of Financial Information. In RRM Volume 4 for the Petroleum Pipelines Industry, the Energy Regulator prescribed the following Activity and Fuel Codes for use in the submission of financial information.

Classification by Activity Code		**of Fuel**	
Activity Code (AA)	**Activity**	**Fuel Code (PPP)**	**Fuel**
N/A	Consolidated	010	Petrol
09	Pipeline	020	Diesel
10	Storage facility	030	Paraffin
11	Loading facility	050	Jet Fuel
		070	Crude Oil

The Energy Regulator must correlate the above coding to any national activity classifications used by the Department in order to assist licensee with their respective harmonization and ease of tallying of Energy Statistics as may be required by the Department from time to time.

9.2 Pipelines Reporting Templates

9.2.1 Pipeline Volumes Reporting - by source/destination

9.2.2 Pipeline Volumes Reporting - by product and customer and destination

9.2.3 Pipeline Occupational Health and Safety Reporting

9.2.4 Pipeline Licensee Participation of HDSA Reporting

9.3 Loading Facilities NFI Reporting Templates

9.3.1 Loading Facility Volumes Reporting –

9.3.2 Loading Facility Volumes Reporting - by product and customer and depot/sector

9.3.3 Loading Facility Occupational Health and Safety Reporting

9.3.4 Loading Facility Licensee Participation HDSA Reporting

9.4 Storage Facilities NFI Reporting Templates

9.4.1 Storage Facility Volumes Reporting –

9.4.2 Storage Facility Volumes Reporting - by product and customer and destination

9.4.3 Storage Facility Occupational Health and Safety Reporting

9.4.4 Storage Facility Licensee Participation of HDSA Reporting