



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

COASTAL WATERS DISCHARGE PERMIT FOR LUCKY STAR LIMITED (LUCKY STAR ST HELENA BAY) IN TERMS OF SECTION 69 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: INTEGRATED COASTAL MANAGEMENT ACT, 2008 (ACT NO. 24 OF 2008) ("THE ICM ACT") - PERMIT REFERENCE NUMBER: 2014/015/WC/ LUCKY STAR LIMITED ST HELENA BAY

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SECTION A: DECISION

Permission is hereby granted in terms of Section 69 of the National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008) to **Lucky Star Limited (Lucky Star St Helena Bay)** for the discharge of effluent into the coastal waters, subject to the terms and conditions set forth in this permit. This permit does not exempt the permit holder from complying with any other applicable legislation.



Dr. Edna Molewa

Minister: Environmental Affairs

Permit signed by Mr M. Dopolo

Acting Chief Director: Integrated Coastal Management

Date: 24/04/18

For office use only	
Date of Issue 30/04/2018	DEPT. VAN OMGEWINGSAAKKE 30 APR 2018 DEPT. OF ENVIRONMENT AFFAIRS

SECTION B: PERMIT HOLDER'S DETAILS

Permit Holder	:	Lucky Star Limited (Lucky Star St Helena Bay)
Postal Address	:	P.O. Box 50, Stompneus, 7382
Physical Address	:	Main Road, Stompneus Bay, St Helena Bay, 7365
Contact Person	:	Ms Titania Stefanu-Zincke
Designation	:	Director - Environmental & Social Risk
Tel	:	(022) 742 8000
Cell	:	(082) 853 4084
E-mail	:	titanias@luckystar.co.za

SECTION C: ACTIVITY DETAILS

Activity That Produces Effluent	:	Fish Processing Factory
Effluent Classification	:	Cooling water and fish waste effluent with brine
Maximum Discharge Volume (combine effluent)	:	33 6424m ³ /day
Location of discharge (<u>for 6 months</u>)	:	Inshore environment (St Helena Bay) – various: <i>Refer to Annexure A</i>
Pipeline length (at the jetty)	:	150m from the factory
Location of discharge (from <u>01 November 2018</u>)	:	32°43' 09.4"S and 17°59' 17.1"E
Pipeline Length (offshore)	:	1.3km

SECTION D: DISCRPTION OF THE PROCESS, LOCATION OF SITE AND DISCHARGE LOCATION

1. Lucky Star Limited is located in Stompneus Bay, Western Cape province within the coastal line of St Helena Bay at the GPS co-ordinates 32°43'27.89"S and 17°58'35.85"E. The effluent generated from the Lucky Star Limited consists of cooling water, fish process effluent and other backwash water from cleaning.
2. The effluent discharged into coastal waters from the factory consists mainly of seawater used in the scrubbers and seawater used for cooling in the evaporation plant, backwash seawater pumps and fishmeal plant, screened blood water, overflow of seawater from vessel offloading, canned fish drainer liquid, cannery cooling water, cannery thawing water. Most of the effluent from the factory runs into the concrete channel to the effluent sump where it is discharged into coastal waters at the jetty. Some effluent does enter the effluent sump (such as the wash water from the fish meal plant, fish weighing,

warehouse, the overflow from ice water and seawater holding tanks as well as storm water from the roof and the warehouse). The offloading of blood water is collected in a blood water container where the blood water is heated and added to the fishmeal process.

3. Due to freshwater scarcity in the Western Cape, Lucky Star Limited is erecting a containerised Seawater Reverse Osmosis plant with associated pipeline infrastructure which will be connected to the existing effluent stream at the jetty.
4. The effluent goes via an effluent sump where sampling takes place before it is discharged along the jetty at the GPS coordinate of 32°43'24.84"S and 17°58'39.16"E. The existing effluent will be combined with 2124m³ p/day of brine from the Reverse Osmosis plant and discharged at the discharge location in the jetty for period of 6 months until a 1.3km meter offshore pipeline is completed by 01 October 2018.



Figure 1: Aerial view showing Lucky Star fish factory, the temporary discharge location at the jetty, and the proposed (new) offshore discharge point to be commissioned by 01 October 2018

SECTION E: GENERAL CONDITIONS

1. This permit is issued to the permit holder as stipulated in section B, for the discharge location stipulated in section D of this permit.
2. This permit may not be transferred or assigned to any other person or organisation, except with prior written permission from this Department.
3. A copy of this permit must be kept at the site mentioned in Section B above and must be produced to any authorised official representing the Department or any employee or agent of the permit holder who works or undertakes work at the site upon request.
4. An appeal against this permit does not suspend the effect of this permit, unless directed otherwise by the Minister.
5. The permit holder will be liable for an annual fee as prescribed by the Minister in the Government Gazette from time to time, as contemplated in Section 83 subsection (2) and (3) of the ICM Act.
6. Access to the site must be granted to any authorised official representing the Department who requests access for the purposes of assessing and/or monitoring compliance with the conditions of this permit or to collect monitoring samples, at any reasonable time during the validity or review period of this permit.
7. The Department reserves the right to revoke, suspend or cancel this permit or to amend any condition of this permit, other than the permit validity period, if:
 - 7.1 The holder of the permit contravenes or fails to comply with condition subject to which this permit is issued,
 - 7.2 The permit is in conflict with a relevant coastal management programme or will significantly prejudice the attainment of a relevant coastal management objective,
 - 7.3 Changes in circumstances require such revocation, suspension, cancellation or amendment of the permit. These circumstances include, *inter alia*, if action is necessary or desirable to prevent deterioration or further deterioration of the quality of the coastal environment and / or if it is in the interest of the whole community; and / or
 - 7.4 It is necessary to meet the Republic's international obligations.
8. The Department reserves the right to instruct the permit holder to modify any monitoring programme or to implement any supplementary monitoring if the Department suspects that the monitoring programme implemented by the permit holder:
 - 8.1 does not meet the requirements of this permit,
 - 8.2 does not meet the environmental quality objectives for the receiving environment, and
 - 8.3 where established or where the monitoring programme does not provide adequate information to determine the effects of the effluent on the receiving environment.
9. If an incident resulting in a discharge that exceeds the limits prescribed in this permit occurs – whether the requisite permission has been obtained from the Department or not, the permit holder must report

the incident immediately to the Department, or where that is not possible, at the earliest opportunity, which must be within seven calendar days, providing full details of the:

- 9.1 cause of the incident
 - 9.2 the measures taken to mitigate the incident,
 - 9.3 alternatives considered other than the discharge of effluent,
 - 9.4 the volume of the effluent released,
 - 9.5 the location where the effluent has been released, and
 - 9.6 any other information requested by the Department subsequent to the reporting of the emergency.
10. The permit holder must, in addition to the above, comply with the requirements of Section 30 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), where applicable.
 11. The permit holder must ensure compliance with the provisions of the duty of care and remediation stipulated in Section 58 of the ICM Act and Section 28 of the NEMA.
 12. Any written agreements entered into between the permit holder and the Department relating to this permit must be attached to the permit as appendices and must be considered to form part of these permit conditions.
 13. All reports and correspondence to the Department relating to this permit must be submitted to:

The Deputy-Director General: Oceans and Coasts

Department of Environmental Affairs

P.O. Box 4390

Cape Town

8000

for attention: The Director: Coastal Pollution Management or electronically to cwdp@environment.gov.za

SECTION F: SPECIFIC CONDITIONS

1. EFFLUENT QUANTITY (FLOW)

- 1.1 Total daily discharge volume must not exceed the levels stipulated in section C of this permit.
- 1.2 Authorised discharge volumes in terms of this permit must not be exceeded without prior authorisation by the Delegated Authority.

2. EFFLUENT QUALITY

- 2.1 No material other than the effluent and its constituents authorised by this permit must be discharged from the discharged point described in Section D.
- 2.2 The maximum limits prescribed in **Table 1**, for the constituents of the effluent discharged via the coastal outfall pipeline, must not be exceeded without prior authorisation by the Delegated Authority

Table 1: Effluent emission limits for constituents and physico-chemical properties as well as the frequency of monitoring prior to effluent discharge into coastal waters

Substance / parameter	Limits to be complied with (until 31 October 2018)	Limits to be complied with (from 1 November 2018 to end of permit validity period)	Frequency of monitoring
pH	7.3 - 8.6	7.3 - 8.6	Weekly
Salinity	64 psu	27.3 psu	Weekly
Temperature	38°C	21°C	Weekly
Total Suspended Solids	20000	13035 mg /l	Weekly
Soap, oil and Grease	10 mg /l	10 mg /l	Weekly
Ammonia	800	64 mg /l	Weekly
COD	250 mg /l	250 mg /l	Weekly
E-coli	48000 (cfu/100ml)	40391 (cfu/100ml)	Weekly

3. MONITORING

3.1 Compliance with monitoring requirements

- 3.1.1 Failure to comply with the monitoring requirements of this permit may affect the decision to amend, revoke, suspend or cancel the permit during the compliance review and may affect the decision to renew the permit or issue a new permit once the validity period has lapsed.

- 3.1.2 Failure to comply with the monitoring requirements of this permit is an offence in terms of Section 79 (3) of the ICM Act and the permit holder may be liable, upon conviction, of the penalties prescribed in section 80 of the ICM Act.

3.2 Effluent quantity (flow) monitoring

- 3.2.1 The maximum daily discharge volume stipulated in Section C of this permit must not be exceeded.
- 3.2.2 Authorised discharge volumes in terms of this permit must not be exceeded without prior authorisation by the Delegated Authority.

3.3 Effluent quality monitoring

- 3.3.1 The specific limits prescribed in **Table 1** must not be exceeded.
- 3.3.2 Monitoring of the effluent quality of the final effluent must be carried out at the effluent sump for fish process effluent and at the point of entrance for all backwash effluent prior to discharge into the sea.
- 3.3.3 The permit holder must record the date, time and severity of all over-flows events that enters the bay from fish-offloading and municipal pump station north-east of the Lucky Star offloading jetty.
- 3.3.4 The permit holder must submit an effluent improvement plan to the department within one (1) month from the date of the issue. The plan must be implemented by 01 November 2018 and must include the following aspects:
- 3.3.4.1 investigation on the methods for effluent treatment to decrease effluent concentration and the bacteria (E.coli) concentrations in the effluent, such as, heat treatment and subsequent cooling of effluent, ultraviolet light or any other biological treatment;
- 3.3.5 Where the sampling and analyses are done internally, samples must be taken by an independent, external auditor (temperature must be sampled in situ) and analysed every 6 months to determine compliance with limits in **Table 1** above. The reports must be submitted to the Department bi-annually (twice a year).

4. ENVIRONMENTAL MONITORING

- 4.1 The permit holder must submit a monitoring programme to the Department for approval within 6 (six) months of the date of issue of this permit which includes, as a minimum the following aspect:
- 4.1.1 An indication of the extent of the 300 metre mixing zone and the monitoring points for near and the far-field;
- 4.1.2 Management strategies and actions to ensure compliance with the permit conditions as well as **Table 2** below,
- 4.1.3 Assessment of potential impact resulting from the effluent discharges;
- 4.1.4 A visual record of the inspection to the marine outfall vicinity, either by photographic means or by video camera must be taken. Records must be kept of such inspections

- 4.1.5 Management strategies and actions to ensure compliance with the environmental quality objectives as per *The South African Water Quality Guidelines for Coastal Marine Waters (Volume 1): Natural Environment, published by the Department of Water Affairs in 1995, or any amended version thereof* and effectiveness thereof;
- 4.1.6 Trends, status and changes in the receiving environment related to the health of important ecosystems and designated beneficial uses;
- 4.1.7 The benthic macrofauna assessment to monitor changes in its composition within the vicinity of the discharge point;
- 4.2 Additional sampling points may be requested by the Department if deemed necessary;
- 4.3 The monitoring programme may, upon written agreement by the Department, be conducted in conjunction with any other institution.
- 4.4 The monitoring programme (s) mentioned above, must be implemented by a suitably qualified person (s) appointed by the permit holder.
- 4.5 The Departments may request investigations of any other issues regarding effluent discharge and the marine environment if and when it is considered necessary.
- 4.6 The monitoring programme, referred to above, must not be changed or amended without prior written permission from the Department.

Table 2: Water quality target values for the natural environment at the end of the mixing zone

Substance / parameter	Target Value/Concentration
pH	7.3 - 8.6
Salinity	33x10 ⁻³ - 36x10 ⁻³
Temperature	The maximum acceptable variation in ambient temperature is 1°C
Total Suspended Solids	The concentration of suspended solids should not be increased by more than 10 % of the ambient concentration
Turbidity / Colour	Turbidity and colour acting singly or in combination should not reduce the depth of the euphotic zone by more than 10% of background levels of 250
Dissolved oxygen	Should not fall below 5 mg/l (99 % of the time) and below 6 mg/l (95 % of the time)

5. ANALYSIS OF SAMPLES

- 5.1 All data analysis must be carried out in accordance with methods prescribed by and obtainable from the South African National Accreditation System, in terms of the Standards Act, 1982 (Act

No. 30 of 1982), unless another comparable method has been approved of, in writing, by the Department.

- 5.2 The permit holder must give access to the Department's official / representative undertaking any audit sampling at any given time.
- 5.3 The methods of analysis may not be changed without prior notification to, and written approval from, the Department.
- 5.4 The Department may request the method of analysis to be changed depending on new technologies and requirement.

6. PIPELINE INTERGRITY AND CONDITION

- 6.1 The pipeline above the high water mark must be inspected on a weekly basis to check for any leaks or malfunctions. A visual record of the inspection, either by photographic means or by video camera must be kept.
- 6.2 The permit holder must conduct survey after three (3) years from the date of the issue of this permit to monitor the stability of the pipeline infrastructure as well as to assist in detecting any mechanical failure which includes a survey of the:
 - 6.2.1 full length of the marine outfall pipeline and associated structures;
 - 6.2.2 ocean bed directly below the marine outfall pipeline; and
 - 6.2.3 the integrity of the pipeline.
- 6.3 The Department reserves the right to request the permit holder to appoint any person to inspect the coastal discharge pipeline and associated structures and equipment independently, should there be reason to suspect that the condition or operation of the coastal outfall pipeline does not comply with the conditions of this permit.
- 6.4 The Department may, if deemed necessary, direct the permit holder to take any steps necessary to ensure the proper functioning of the coastal discharge pipeline and its associated structures.

7. MALFUNCTIONS / ABNORMAL CONDITIONS

- 7.1 Accurate, up-to-date records of all system malfunctions resulting in the disposal of water containing effluent not in accordance with the requirements of this permit must be kept.
- 7.2 Permit holder must conduct monitoring as normal during upset / abnormal conditions as specified in this permit.
- 7.3 The following headings must be used for the above records, accompanied by a full explanation of all contributory circumstances and proposed / implemented mitigation measures:
 - 7.3.1 operating errors;
 - 7.3.2 mechanical failure (including design, installation and maintenance);
 - 7.3.3 environmental factors (e.g. floods);

- 7.3.4 loss of supply services (e.g. power failure);
- 7.3.5 other causes; and
- 7.3.6 undetermined.

8. CONTINGENCY PLANS

- 8.1 The permit holder must submit a Contingency plan to the Department for approval within 6 (six) months of the date of issue of this permit and must consist of stipulated procedures, schedules and responsibilities which include, inter alia:
 - 8.1.1 Standard operating procedures for detection of problems and responding to emergency incidents as well as upset conditions;
 - 8.1.2 staff schedules;
 - 8.1.3 programmes for the maintenance and surveillance of the physical condition of equipment and facilities;
 - 8.1.4 standby / alternative personnel / service companies for the continued operation and maintenance of effluent discharge facilities during employee shortages (strikes, incidents, ill-health, etc.);
 - 8.1.5 stock lists and suppliers for chemicals, spare parts and equipment components that can adequately ensure the continued operation of the effluent discharge facility during an emergency or breakdown;
 - 8.1.6 emergency standby power facilities for high-risk areas;
 - 8.1.7 emergency standby pumps, and
 - 8.1.8 provision for sufficient storage capacity to cope with the normal or typical load for the area during power failures etc.
 - 8.1.9 schedule of monitoring and sampling analyses when emergency or upset conditions occur.
- 8.2 The permit holder must provide the details on the type of remediation (corrective measure) to be implemented for discharge into the coastal environment that exceeds the limits prescribed in this permit.
- 8.3 The permit holder must outline reporting procedures and protocols for reporting events of malfunctioning/breakdown of the effluent disposal system, as well as the pollution events. These should include internal procedures as well as reporting to responsible authorities on local, regional, and national levels (including, but not limited to the reporting of emergency incidents in terms of Section 30 of the NEMA).
- 8.4 The permit holder must ensure that the contingency plan, once approved by this Department, is implemented at the facility mentioned in section D.

9. REPORTING REQUIREMENTS

- 9.1 All reporting to the Department must occur on prescribed forms, where available or in a format as agreed to, in writing, by the Department.
- 9.2 The permit holder must establish or join a Permit Advisory Forum ("PAF") or an environmental stakeholders meeting. Such a body must meet, as a minimum, once quarterly, to discuss any breach of permit conditions, monitoring and reporting requirements as well as general effluent issues. The forum may be facilitated by an independent facilitator and composed of the permit holder (or a representative), interested and affected parties (such as NGO's, local interest groups, etc.) and relevant government institutions. PAFs may be established for either a single pipeline (i.e. one permit holder) or a receiving environment (i.e. several permit holders). Details (i.e. TOR's) of the forum must be submitted to the Department within 6 months of the date of issue of this permit.
- 9.3 The following must be reported on and presented quarterly to the Department:
- 9.3.1 Compliance with **Tables 1 and 2** as well as the exact volume discharged, showing monthly and daily discharge volumes;
 - 9.3.2 All minutes emanating from the PAF, where established.
 - 9.3.3 The result / findings of the monitoring programmes done in terms of section F condition 3.2 and 3.3.
- 9.4 The following must be reported on and presented annually to the Department:
- 9.4.1 A report on the monitoring of trends, impact (marine impact assessment) and incidents as soon as it becomes available, but not later than 3 (three) months after being completed unless otherwise agreed to, in writing, by the Department.
 - 9.4.2 A report detailing the results of the independent audit monitoring, must be submitted / **bi-annually** to the Department if the sampling is done internally.
- 9.5 The following must be reported on and presented at the compliance review meeting to the Department:
- 9.5.1 A report detailing compliance with section F condition 3.2 and 3.3.
 - 9.5.2 Any investigations carried out in terms of section F: condition 10 at the compliance review and upon submission of a renewal / new application.
 - 9.5.3 Any defects or deficiencies in terms of the coastal outfall must be reported to the Department immediately, or where that is not possible, at the earliest opportunity, which must be within 7 (seven) calendar days. Where necessary, repairs must be carried out on the pipeline immediately.

10. INVESTIGATIONS

- 10.1 The permit holder must investigate methods for continuous improvement for the effluent quality.
- 10.2 The permit holder must investigate means of optimising dispersion at sea and minimising the impact on the receiving environment and other beneficial users in the coastal waters.

10.3 The Department reserves the right to instruct the permit holder to implement any improvements identified in the investigations described in this permit.

11. DECOMMISSIONING

11.1 The permit holder must provide a decommissioning plan for the pipeline one year prior to the actual date of decommissioning of the pipeline, to the Department.

12. COMPLIANCE REVIEW COMMITTEE

12.1 A compliance review consisting of authorities (as determined by the department) will be established.

12.2 The committee will convene when necessary to review the status of compliance to permits conditions.

12.3 The committee may recommend amending, revoking or suspending the permit if it is deemed necessary to prevent further environmental deterioration due to the effluent discharge.

12.4 The committee may invite any specialist or technical experts to participate in the review processes and committee meetings and to make recommendations on prohibiting or continuing with the discharge at any time during the validity period.

13. PERMIT VALIDITY

13.1 This permit is valid for a period of 5 (five) years, subject to a compliance review at 30 (thirty) months or as deemed necessary by the Department during the validity period of this permit.

13.2 The permit holder must submit a renewal application at least 6 (six) months before the expiry of this permit to the Department. Where a renewal application has been submitted to the Department before the lapsing of the validity period, the validity of this permit will automatically be extended ("the period of administrative extension") from the day before this permit would otherwise have lapsed, until the renewal application has been decided.

SECTION G: APPEALS

In terms of section 74 (2) of the ICM Act:

"A person who is dissatisfied with any decision taken to issue, refuse, amend, suspend or cancel an authorisation, may lodge a written appeal against that decision with – the Minister, if the decision was taken by a person exercising powers which have been delegated by the Minister to such person in terms of this Act"

Formal, motivated appeals must be made in writing within 30 (thirty) calendar days of the date of issuing of this permit by means of one of the following methods:

By post: To the Minister of Environmental Affairs

Private Bag X447

Pretoria

0001

By hand: 473 Steve Biko Street

Green House

Arcadia,

Pretoria

0083

If the appellant is not the permit holder, the latter must be informed of the appeal within the appeal period referred to above and the appellant must provide the permit holder with reasonable access to a full copy of the appeal, if requested.

Appeals should be addressed to and appeal forms can be obtained from:

Adv. Radia Razack

Director: Law Reform and Appeals

Tel: (021) 819 2426

E-mail: Rrazack@environment.gov.za

SECTION H: REASONS FOR THE DECISION

1. During the validity period of this permit, the discharge of effluent into coastal waters from Lucky Star Limited (Lucky Star St Helena Bay) is unlikely to:
 - 1.1 Cause irreversible or long-lasting adverse effects in the receiving environment and other coastal water users including recreational use;
 - 1.2 Prejudice significantly the achievement of any coastal management objectives contained in a coastal management programme or;
 - 1.3 Be contrary to the interests of the whole community.

2. In reaching its decision, the Department, *inter alia*, considered the following:
 - 2.1 The information contained in the revised application form for a coastal waters discharge permit included a brine discharge, dated 28 November 2017, and its associated documents as well as the "*Effluent characterisation and effluent plume analysis for the Lucky Star Limited St Helena Bay fish processing factory: Prepared by Anchor Environmental Consultant, Report Number. 1628/1 October 2015*" was taken into consideration for the authorisation of the coastal waters discharge permit.
 - 2.2 The objectives and requirements of relevant legislation, policies and guidelines, including sections 69 of the ICM Act and section 2 of NEMA;
 - 2.3 Site inspections conducted by the officials of this Department on 02 July 2014 and 23 May 2016;
 - 2.4 The declaration that all information submitted by the permit holder in connection with the granting of this permit is complete, factual and accurate in all material respects.

SECTION I: DISCLAIMER

The Department of Environmental Affairs is exempt from any claims against loss or damage incurred by the permit holder in applying for, obtaining and complying with the conditions of this permit or any non-compliance thereof.

-----END OF PERMIT-----

Annexure A: Various discharge points that include backwash effluent and stormwater over the next 6 months

Discharge Point Co-ordinates (pipe at the jetty)	:	32°43'24.84"S and 17°58'39.16"E
Discharge Point Co-ordinates (at factory sump)	:	32°43'26.96"S and 17°58'38.35"E
Discharge Point Co-ordinates (at old slipway)	:	32°43'25.17"S and 17°58'37.15"E
Discharge Point Co-ordinates (at cannery wall)	:	32°43'26.56"S and 17°58'38.11"E
Discharge Point Co-ordinates (at fishmeal pits)	:	32°43'25.68"S and 17°58'37.75"E
Discharge Point (from jetty quay)	:	32°43'24.20"S and 17°58'41.06"E
Discharge Point (at seawater holding tanks)	:	32°43'25.97"S and 17°58'37.84"E
Discharge Point (at cannery intake overflow)	:	32°43'30.67"S and 17°58'40.82"E
Discharge Point (at jetty blood water north)	:	32°43'23.90"S and 17°58'41.51"E
Discharge Point (at jetty blood water south)	:	32°43'24.27"S and 17°58'41.68"E
Storm Water Discharge Point 1 (at Ice plant)	:	32°43'23.02"S and 17°58'35.61"E
Storm Water Discharge Point 2 (at ice plant & radio room):	:	32°43'24.55"S and 17°58'36.58"E
Storm Water Discharge Point 3 (at the Cannery)	:	32°43'29.84"S and 17°58'40.59"E