

Aquaculture Stewardship Council and Marine Stewardship Council

ASC-MSC Seaweed (Algae) Audit Reporting Template
Public Certification Report

Version 1.0 (issued 7 March 2018)



Aquaculture
Stewardship
Council



Scheme documents:

ASC-MSC Seaweed (Algae) Standard

ASC-MSC Seaweed (Algae) Certification and Accreditation Requirements

This document is to be cited as:

ASC-MSC Seaweed (Algae) Audit Reporting Template v1.0

Versions issued

Version no.	Date	Description of amendment
1.0	08-12-17	N/A - new document

Production unit name: euglena Co., Ltd. Algae farms

Client Contact details: 5-29-11 Shiba, minato-ku, Tokyo, 105-0014 Japan

CAB contact details: 3-6-7 Kandakajicho, Chiyoda-ku, Tokyo 101-0045, Japan

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Date: 2022/04/20



Instructions for using the ASC-MSC Seaweed (Algae) Audit Reporting Template

This Reporting Template should be used for initial certification, and re-certification audits

The following reports shall be prepared using the Reporting Template:

- Client Draft Report
- Public Comment Draft Report
- Final Report (FR)
- Public Certification Report (PCR)
- Re-assessment report

In this template you will find tabs for each section of the report.

Each tab has instructions of what is required within that section of the report. Sometimes an instruction can be traced to an individual requirement in the CAR or Standard. At other times, an instruction represents multiple requirements.

Additional supporting material can be attached as a PDF Annex.

Any references used to support statements in the evaluation tables of the reports shall be included in the 'References' section of the table and an in-text reference (e.g. number or author, date) made to the relevant source.

Contact details

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Executive summary

A brief description of the scope of the audit	Scope of the audit was onshore aquaculture facilities of euglena and chlorella managed by Yaeyama Shokusan Co.,Ltd, an affiliate company of Euglena Co.,Ltd. No wild stock is used. Seeds are cultured repeatedly inside the facilities. After cultivation, euglena and chlorella are dehydrated and dried to produce powdered products. The scope of the audit includes product packaging and shipping. All euglena and chlorella within the facilities are included in the scope.
Main strengths and weaknesses of the unit of assessment	<p>Strength: The farm qualifies to be category Cii, meaning 'Cultivation entirely in land-based systems without needing to be supplied with seeds from wild stocks'. Hence no impact on wild stocks. Since the farm is entirely in land-based, the impact on natural environment is also very small. Euglena Co.,Ltd is first section of the Tokyo Stock Exchange which ensures sufficient corporate control system to be in place. The company makes sufficient care to the employees of the affiliate company, Yaeyama Shokusan Co.,Ltd, as well as to the local community around the farm.</p> <p>Weakness: Although the drained water after cultivation of the algae only contains nutrients and organic substances and no chemical substance is included, the water is drained to the dug ponds to be stored and naturally drained through penetration to the ground. No impact has been identified to the surrounding sea, but the company has not clearly understand the possibilities of negative impact of the drained water to the surrounding environment and monitoring is ongoing.</p>
A summary of the major findings	No NC was raised.
Audit determination	euglena Co.,Ltd. is granted for the ASC-MSC Seaweed (Algae) certification for <i>Euglena gracilis</i> and <i>Chlorella sorokiniana</i> .

Unit of Assessment

The Unit of Assessment defines the extent of the specific production unit that is to be assessed for compliance with the Standard. [see 3.1]

Name of the production unit	Yaeyama Shokusan Co.,Ltd.
Target species common name/s	euglena, chlorella
Species Latin name	Euglena gracilis, Chlorella sorokiniana
Production system	Inland farming / artificial seedlings
Location of the production unit	287-14 Shiraho Ishigaki-city Okinawa 907-0242 Japan
Stock Region	Not applicable as this is category Cii. No wild stock is used.
Receiving water body	Shiraho Sea area, Ishigaki Island, Okinawa
Clients part of the production unit	Yaeyama Shokusan Co.,Ltd.
Facilities	Incubators, culture tanks, culture pools, separators, drying machines, packing machines, refrigerators, warehouses, boilers
Unit of Certification (if different)	UoC is the same as UoA.

Background information

Seaweed category	Cii Cultivation entirely in land-based systems: Supply of seed from wild stocks NOT required or negligible
History of the Production unit	Yaeyama Shokusan Co.,Ltd was established in 1975. Chlorella cultivating factory started operating in 1978. In 1984, the company built additional 13 culture pools. In 2005, the company established a production system of euglena using the Outdoor Mass Cultivation Technique. In 2013, the company became an affiliate of Euglena Co.,Ltd to be a member of Euglena group. In 2015, the company obtained FSSC22000 certification. The first ASC-MSC seaweed (algae) certification was obtained in 2019.
Harvest season	Euglena and chlorella are harvested throughout the year and there is no specific harvesting season.
Target species background	<p>Euglena and chlorella are monocellular organism that perform photosynthesis. Cell division happens once during night. 2 cells are formed from one cell of euglena and 4 cells are formed from one cell of chlorella. In the final stage of cultivation, Euglena and chlorella are cultivated in the outside pools or tanks until the population density becomes sufficiently high to be harvested. After cultivation, euglena and chlorella are dehydrated and dried to be powdered products. The products are packaged and put in boxes to be shipped.</p> <p>They do not use natural seeds.</p>
Harvest/ production data	euglena: Approx. 64 tons per year, chlorella: 58 tons per year,
Ecosystem Background	<p>The area around Ishigaki Island is included in the Iriomote Ishigaki National Park, where coral reefs have developed, and mangrove forests and tidal flats are found in many estuaries and bays, making it a highly important sea area for the conservation of biodiversity. The Shiraho area of Ishigaki City, Okinawa Prefecture, where Yaeyama Shokusan is located, is flat or hilly, and is used as farmland or pastureland. There is a village at the southern end of the Shiraho area, and people live close to the coast; the UoA culture plant is located at the southern end of the Shiraho area, a short distance from the residential area, on land about 50 meters inland from the coast. The surrounding area is vacant except for an adjacent social welfare facility.</p> <p>The sea area in the Shiraho district is known for its high diversity of coral species, but the southern part of the Shiraho district on the UoA side is not a conservation target as it is designated as an ordinary area in the national park. On the shore, there is a 200~300m wide eelgrass bed, which is inhabited by <i>Thalassia hemprichii</i>, <i>Halodule uninervis</i>, <i>Cymodocea rotundata</i>. Within the reef, coral communities such as blue coral can be found in various places, and algae beds or coral communities dominate.</p> <p>Monitoring of coral reefs has been conducted at an area near the UoA (in front of Miyara village), and coral cover was less than 1% in surveys conducted from 2007 to 2018, and less than 5% in surveys conducted in 2019 and 2020. From the beginning, there has been little coral, and seaweeds such as <i>sargasso</i> and <i>Codium</i> have thrived. There are only a few coral species such as <i>Poritidae</i>, <i>Astraeidae</i>, and common corals on the rocks at shallow depths.</p> <p>There are 6 coral species which are listed as ETP species in Japan by Marine Organism Red List by Ministry of the Environment, but those have not been found in the sea area in front of the farm. There are spawning sites of 3 endangered marine turtle species identified by the government of Japan and IUCN around Ishigaki Islands. Spawning of turtles are reported in the surrounding area, although it is not frequent. Three potential ETP species can be specified: hawksbill turtle (<i>Eretmochelys imbricata</i>), loggerhead turtle (<i>Caretta caretta</i>), and green turtle (<i>Chelonia mydas</i>). However, Spawning of turtles are reported only very occasionally here. Only the possibility of negative impact of the company's activities to the endangered species is the aforementioned drained water. However, there is no evidence that demonstrate any negative impact of drained water on the endangered species. Hence at the moment, there is no measure needed to mitigate the impact of drained water to the endangered species.</p> <p>There is no risk of unwanted catch of species as the farm is entirely in land-based. No negative impact possible other than a potential impact on endangered species.</p> <p>After cultivating euglena and chlorella, Yaeyama Shokusan uses a separator to dehydrate them and remaining water is drained into a dug ponds in the facility area to be further drained naturally through penetrating into the ground. The distance between ponds and coast is about 100 to 150 m. The There is no cumulative impacts.</p>
Management system	<p>The farm is managed by Yaeyama Shokusan Co.,Ltd, an affiliate company of Euglena Co.,Ltd. There is no specific legislation to regulate in land-based Seaweed (Algae) aquaculture facilities. Applicable legislations are the same as other normal companies such as Water Supply Act, Air Pollution Control Act, Noise Regulation Act, Waste Management and Public Cleansing Act, Fire Service Act and Industrial Safety and Health Act. The company handles food, so that Food Sanitation Act is also applicable. Application of Water Pollution Prevention Act is exempted for in land-based facilities. Since the algae farm is closed within the facilities owned by themselves, the operation is the same as normal food production facilities which means there is no legislation mandating the company to work together with local community or stakeholders. Decision making is controlled only within the company.</p> <p>The company has sections for each production process and management contents. Employees are managed by each section manager. There are several meetings of section managers and higher management. Allocation of responsibilities and decision making protocol are clearly specified and there is a system in place to immediately implement the decisions. The company regularly reviews and makes improvements to the current system.</p> <p>As aforementioned, the algae farm is closed within the facilities owned by themselves, the operation is the same as normal food production facilities which means there is no legislation mandating the company to work together with local community or stakeholders. Decision making is controlled only within the company.</p> <p>At the moment, the company does not receive any comments from people outside the company on management of their operation. The company has been conducting questionnaires to employees residing in the local Shiraho area and visiting adjacent social welfare facilities and elementary schools to listen to their requests in order to proactively contribute to the community. The company plans to establish a cooperative system related to disaster prevention, a request received at that time. In addition, the company provides visiting classes at elementary and junior high schools.</p> <p>The website of Euglena Co.,Ltd has a page for submitting any comments regarding the company's activities.</p> <p>Decision making done internally by the company. Each position in each section has a specified authority. Each decision making is done by the respective person with the authority.</p> <p>The company can harvest at its own will since the farm is entirely in land-based within the facilities of themselves. Hence there is no special aspects or regulations to take care of when harvesting.</p> <p>No external public surveillance is required as the facilities are all within the area of their own. The company is certified to FSSC22000 and receives surveillance by a certification body of it. The company conducts internal inspection in order to check compliance with applicable legislations, viability of management system and condition of health and safety. As a Euglena group company, internal audits are also conducted by internal auditors of Euglena Co., Ltd regularly to identify any non-conformities to be addressed.</p>
Employee	As of January 12, 2022, the company has 44 employees. The basic working hours are 8:00-17:00, with two days off per week on weekends.
Surrounding Community	<p>The farm is a closed facility with a clear border. Hence there is no affected stakeholder in the production unit. Unauthorized access to the facilities of the companies by external people is prohibited by law.</p> <p>The farm is a closed facility with a clear border. Hence there is no community users or activities. There is a welfare facility for the aged people in adjacent land. Consultation to the facility demonstrated that there is no impact on the facility by activities of Yaeyama Shokusan Co.,Ltd. The closest residential area is 50 m to 100 m away from the farm and there is a forest between the farm and the residential area. Interview to several local people revealed that depending on the weather and wind directions, they can detect some odor of the facility but the degree is not at the level of any concern.</p> <p>The farm is a closed facility with a clear border. Hence there is no individuals or groups granted rights of access to the production unit.</p>
Information if family business	This is not family business.
Main commercial market	Harvested euglena and chlorella are sold in a form of powdered material. They are used as raw materials in outsourced processing factories and other buyers' facilities to produce mainly food products, especially health food products targeting Japanese market. R & D activities are promoted for seeking the use of euglena. So euglena is now sold and used as a raw material for cosmetic products too. Further R & D is looking into possibilities of using euglena as bio fuel materials.

Other production units in the area	<i>The farm is a closed facility with a clear border managed by Yaeyama Shokusan Co.,Ltd. Hence there is no other production units.</i>
Statement that the production unit is within scope	<p><i>A clear statement from the CAB that the production unit entering assessment meets the scope requirements in Section 2 Seaweed Standard. The scope requirements in Section 2 Seaweed Standard are met as follows:</i></p> <p><i>2.1 Harvesting or farming activities are only eligible for certification if the target species is a seaweed.</i> <i>- The target species produced by UoA are Euglena and Chlorella, both of which are algae.</i></p> <p><i>2.2 The Standard applies globally to all locations and scales of operations, including both harvesting of wild stocks and production from aquaculture systems.</i> <i>- Scope of this assessment is production from aquaculture system.</i></p> <p><i>2.3 This standard applies to seaweed production units only. Other production units in scope for assessment under the existing ASC or MSC standards are in no way affected by the Standard.</i> <i>- Production unit only includes production of euglena and chlorella.</i></p> <p><i>2.4 Harvesting or farming activities involving the introduction of alien (= non-native) species are not eligible for certification, unless:</i> <i>2.4.1 The introduction occurred at least 20 years prior to the date the application is made for assessment against the Standard, or</i> <i>2.4.2 The alien species is cultured in on-land facilities that are completely separated from the aquatic environment.</i> <i>- euglena and chlorella are not alien species.</i></p> <p><i>2.5 Organisations seeking certification shall have been in operation for at least 12 months, or one harvest cycle, whichever is less.</i> <i>- Chlorella production has been in operation for more than 40 years. Euglena production has been in operation for more than 10 years.</i></p> <p><i>2.6 Organisations seeking certification shall have available records of performance data covering the periods of time specified in this standard.</i> <i>- The applicant is certified for ASC-MSC seaweed algae certification from 2019 onwards, and the applicant has sufficient performance data to cover the period specified in the standard.</i></p> <p><i>2.7 Harvesting or farming activities which use mutagenic, carcinogenic or teratogenic pesticides, or any other chemicals that persist as toxins in the marine environment or on the farm or farmed seaweeds, are not eligible for certification.</i> <i>- The applicant does not use any toxic chemical during its production process. During quality test, there is a occasion that toxic chemicals used, but this process is clearly separated from the production process so that there is no risk of contamination.</i></p>

Audit Plan

Assessment team (add or delete rows as needed)	Name	Summary of qualification
Team leader, Social auditor	Naoya Ogawa	He is a Environmental science expert. He has been a ASC farm certification auditor for five years and has experience of ASC farm audit more than 30. He completed ASC-MSQ seaweed auditor training. He will also be a social auditor. He participated the social audit of ASC more than 20 and completed SA8000 advanced course training. He has no conflicts of interest in relation to the production unit under assessment.
Team member 1	Wataru Koketsu	AMITA Corporation. His undergraduate graduation thesis is biodiversity of algae, and His master's thesis is statistical analysis of freshwater fish disease and water quality. He has a master's degree in Fishery and Wildlife and more than five years of experience in biological research and analysis of algae, fish, benthic organisms, water quality and vegetation, as well as environmental conservation. He has participated the ASC-MSQ Seaweed and Chain of Custody Certification Training in 2019.
Team member 2	Chiko Tsukazaki	Trainee, AMITA Corporation. Participated the ASC-MSQ Seaweed and Chain of Custody Certification Training held in Busan on 14th-16th October 2019

Site visit	
Date of site visit	11-12th Jan. 2022
Location	Yaeyama Shokusan Co., Ltd. 287-14 Shiraho, Ishigaki-shi, Okinawa, 907-0242, Japan

Stakeholders interviewed

Name	Organisation	Position	Summary feedback received
Stakeholder 1	Shiraho Community Centre	Director	There are almost no unusual odors coming from the culture facility. / The situation in the past has improved. There are expectations for the establishment of a cooperative system with the local community. / We have received discounts on products such as green juice and cream. / I have heard about the ASC certification for sustainable production. The facility serves as a destination for national dignitaries (ministers, Cabinet Office) and is requested to provide explanations related to SDGs several times a year.
Stakeholder 2	Social Welfare Service Corporation Kibogakka Care House Basukinawa	General Manager	In some cases, the city proposes the facility as a destination for the inspection, and in other cases, the inspector intends to visit. Basically, the company accepts our requests. It is highly evaluated by the visitors.
Stakeholder 3	City Hall	Planning and Policy Division	Last year, we conducted several on-site inspections to check the facilities. There are no drainage problems and no related complaints. As a research facility, it falls under the category of specified facilities, and there were no problems when we inspected it four or five years ago.
Stakeholder 4	Public health center	In charge of food relations	
Stakeholder 5			
Stakeholder 6			
*Due to personal information protection, individual names will not be disclosed.			There was no negative opinion, and in relation to principle 5, we confirmed that relations with the community were well maintained.
			Response from CAB

Stakeholders written submission received before PCDR

Note: All written submissions from stakeholders (if any) received during the audit should be attached as a PDF Annex

Name	Organisation	Position	Summary feedback received
None			

Employees interviewed

Name	Organisation	Position	Summary of feedback received
Employee 1	Yaeyama Shokusan Co., Ltd.	Manager, Safety and Health Office	If an employee feels that something is dangerous during work, the employee reports it, and the Safety Office interviews the employee and prepares a report. The reports are shared with the entire company via e-mail and morning meetings, and are also explained to the board of directors for countermeasures. Monthly patrols are conducted by the committee, and a safety patrol is conducted once every three months.
Employee 2	Yaeyama Shokusan Co., Ltd.	Technical Department	No employees have been injured in the past three years. Study sessions on the handling of power tools are held on a regular basis. First aid training, evacuation training, and fire drills are conducted twice a year. Working environment measurements (WBGT values are taken at six locations in the plant) are taken and WBGT Forecasts are made every morning. This is reminded to employees in the morning meeting.
Employee 3	Yaeyama Shokusan Co., Ltd.	Quality Control Section	There is a rule to submit reports of near-misses, and we submit them. There is no dangerous work. Personnel with the necessary qualifications are assigned to the work. In some cases, new qualifications are acquired. Basically, there is no overtime work, but there is overtime work when there are urgent tasks.
Employee 4	Yaeyama Shokusan Co., Ltd.	Shipping services	Closed on weekends. Being a member of the labor union. Since organic solvents are used in the laboratory, they are disposed of properly. Protective equipment and masks are thoroughly worn. Training is provided once a year on reagent leakage.
Employee 5	Yaeyama Shokusan Co., Ltd.	Chlorella Production Department	Qualifications required for handling organic solvents are obtained at the company's expense. Employees receive training on ASC once a year. Injuries during work were covered by workers' compensation insurance.
			There is no dangerous work in particular. My back hurts during sleeping. There is high temperature equipment, and long-sleeved work clothes are worn. It is hot in summer. I wear a safety belt when working at high elevations. More than one person works at a time. I have received training on harassment. We plan to negotiate with the company if the labor union receives requests from employees.
			The amount of steam is adjusted by adjusting the valve in dangerous areas, and care is taken to avoid burns. There is no work at height. Forklifts are used. Paid vacations are easy to obtain. We take qualification courses. There have been no reports of work-related accidents in the department.
			In relation to Principle 4, it was confirmed that there is almost no problem from the employee side as well. Although there was an opinion on the salary level, as a result of investigating with PH4.5, it was not confirmed that the company's wage level was lower than the living wage.
			Response from CAB

Only for the Final Report and Certification Report

Stakeholders' written submissions received during the PCDR

Name	Organisation	Position	Summary of feedback received
None			

All written submissions from stakeholders (if any) received during the audit should be attached as a PDF Annex

Assessment tree

The final set of PIs to be included in the assessment tree shall be defined depending on the characteristics of the production unit in the UoA, as indicated in Table 3 of the Standard. Unless otherwise indicated, each PI shall be scored.

		Scoring Issue	Minimum	Met	Justification	Target	Met	Justification	References	Level	Condition (if relevant)
1 Stock Status	1.1 Stock Status	a. Stock status relative to irreversible impact	Available information indicates that the wild stock is above the point where the harvesting impact is irreversible or very slowly reversible	N/A	Not applicable as they do not use wild stock or wild seed.	The wild stock is at or fluctuating around a level consistent with MSY (or proxy) OR Available information indicates that harvesting impact causes insignificant change to the wild stock, which is unlikely to be detectable against natural variability for this population, or if detectable is minimal and has no impact on population dynamics.	N/A	Not applicable as they do not use wild stock or wild seed.		N/A	
		b. Harvest Strategy	The harvest strategy is expected to achieve stock management objectives reflected in the stock status target (PI 1.1), based on a plausible argument.	N/A	Not applicable as they do not use wild stock or wild seed.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in the stock status target (PI 1.1).	N/A	Not applicable as they do not use wild stock or wild seed.		N/A	
	1.3 Genetic impact on wild stock	a. Genetic	The harvesting or farming activity is unlikely to impact the genetic structure of wild populations.	N/A	Not applicable as there is no translocation of cultivated seeds.	The harvesting or farming activity is highly unlikely to impact the genetic structure of wild populations.	N/A	Not applicable as there is no translocation of cultivated seeds, it is a land-based system (category C), and there is no contact with, extraction from, or impact on the marine environment which cannot be considered negligible.		N/A	
		b. Genetic impact management	There are measures in place, which are expected to maintain the genetic structure of the wild population at levels compatible with the target Genetic outcome level of performance.	N/A	Not applicable as there is no translocation of cultivated seeds.	There is a partial strategy in place, which is expected to maintain the genetic structure of the wild population at levels compatible with the target Genetic outcome level of performance.	N/A	Not applicable as there is no translocation of cultivated seeds, it is a land-based system (category C), and there is no contact with, extraction from, or impact on the marine environment which cannot be considered negligible.		N/A	
	2.1 Habitats	a. Seaweed-habitat status	The UoA is unlikely to reduce structure and function of the habitat created by the target seaweed to a point where there would be serious or irreversible harm.	Y	See Justification of the Target level.	The UoA is highly unlikely to reduce structure and function of the habitat created by the target seaweed to a point where there would be serious or irreversible harm.	Y	UoA cultivates isolates of <i>Euglena</i> and <i>Chlorella</i> in their land-based culture facility. There is no risk of any negative impact on wild stocks. Therefore, the UoA is highly unlikely to reduce structure and function of the habitat created by the target seaweed to a point where there would be serious or irreversible harm.		Target level	
		b. Other commonly encountered habitat status	The UoA is unlikely to reduce structure and function of other commonly encountered habitats to a point where there would be serious or irreversible harm.	Y	See Justification of the Target level.	The UoA is highly unlikely to reduce structure and function of other commonly encountered habitats to a point where there would be serious or irreversible harm.	Y	UoA cultivates isolates of <i>Euglena</i> and <i>Chlorella</i> in their land-based culture facility. The culture facility is located at the southern end of the Shiraho district, a short distance from the residential area, and about 50 meters inland from the coast. The site is surrounded by a wall to prevent intrusion from the outside. There are vacant lots and facilities around the site, but no commonly encountered habitats are present. Therefore, the UoA is highly unlikely to reduce structure and function of other commonly encountered habitats to a point where there would be serious or irreversible harm.		Target level	
2 Environmental impacts	2.2 Ecosystem structure and function	c. Vulnerable marine Ecosystem (VME) status	The UoA is unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	Y	See Justification of the Target level.	The UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	Y	The VME (Vulnerable Marine Ecosystem) that possibly could be affected is the marine ecosystem in the coastal area about 50m away from the edge of the culture facility. This area is designated as an ordinary area of the Iriomote Ishigaki National Park, where seaweed beds and coral reefs are distributed. In the coral reefs, coral and Sargassum/Elagans beds are mixed together with coral communities to form highly diverse communities. The area has a high diversity of coral species and a fragile ecosystem represented by eight coral species, and has been selected by the Ministry of the Environment as an area of high importance from the perspective of biodiversity. But the farm is entirely in land-based and there is no activity (e.g. direct contact, fishing, stripping, etc.) to reduce structure and function of the VME habitats directly. Therefore it is considered highly-unlikely that the farm is causing any serious or irreversible harm to structure and function of VME habitats. It is unlikely to cause such harm in the future either. UoA does not implement any activities (fishing, extraction, etc.) which are subjected to regulations of the National Park. Therefore, the UoA is highly unlikely (Highly unlikely < 30% likely) to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	<ul style="list-style-type: none">— A map of Iriomote-Ishigaki National Park (area updated 15 Apr 2016, Ministry of the Environment)— The Ministry of the Environment's website, Marine Areas of High Importance from the Perspective of Biodiversity— Report on the 7th Basic Survey on Nature Conservation Shallow Water Ecosystem Survey (Seaweed Bed Survey) (September 2008, Bio diversity Center, Nature Conservation Bureau, Ministry of the Environment)	Target level	
		a. Ecosystem status	The UoA is unlikely to disrupt the key elements underlying ecosystem structure and function to the point where there would be serious or irreversible harm.	Y	See Justification of the Target level.	The UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to the point where there would be serious or irreversible harm.	Y	The UoA conducts algae production in a land-based culture facility, and there are no activities (direct contact, fishing activities, trespassing, etc.) that directly affect the structure and function of the ecosystem. The algae is dewatered at the end of the production process, and the wastewater is stored in several settling ponds dug unearthen on the site. After the wastewater is drained, it gradually percolates naturally, and about six months after the production is finished and the wastewater stops, all the water percolates and only the sludge remains. It is assumed that this wastewater percolates through the ground and is eventually discharged into the surrounding sea area. One of the ecosystems that could be affected by the production activities at the UoA is the coastal coral reefs located 50 to 100 meters from the facility. The wastewater contains nutrients and organic matter used in the culture, but no pesticides or insecticidal ingredients. It is not known how much of the ingredients are eventually discharged into the sea. The ASC Objective Plan was developed to provide evidence to determine that the discharge of production effluent from the reservoir on the UoA property into the sea is highly unlikely to disrupt the key elements underlying ecosystem structure and function to the point where there would be serious or irreversible harm. And UoA conducts water quality monitoring of production effluent (biomonthly during production), visual monitoring of Shiraho beach (once/3 months), and water quality analysis of Shiraho beach (once/year during production). In line with the plan, the farm conducted sampling surveys of seawater at seven sites along the neighboring coast and at two control sites during the production period (August 19, 2021), and analyses of COD, TP, and TN were conducted by a third-party measurement organization licensed by Okinawa Prefecture. Comparing these results with water quality guideline values for maintaining healthy coral reef ecosystems (TP: annual average of 0.01 mg/L or less, TN: annual average of 0.08 mg/L or less), all sites, including the sampling site located approximately 3.2 km away from the UoA in a straight line, were not within the guideline values. Phosphorus values were also far below the guideline values. Since the sea was rough and muddy when the water was sampled, it was thought that the effect on the value was largely due to the bottom sediment being rolled up, and a re-survey was conducted on November 7 (during production). The analysis results of the re-survey showed that the nitrogen values did not fall far below the guideline values at any of the sites except for the site near Myara Bay, which was 1.5 km away from the UoA by straight line. The phosphorus values were confirmed to be within the guideline values at all sites. The water quality guideline values were set based on the results of surveys conducted from 2009 to 2015 (total nitrogen (TN), total phosphorus (TP), turbidity, horizontal transparency, and coral cover were surveyed three times a year at 45 sites in 22 areas) by the Okinawa Prefectural Institute of Public Health and Environment in an emergency meeting on coral bleaching (2017/04/23). The UoA speculates that the phosphorus values are strongly influenced by the environment, and that for nitrogen (which is generally higher than the previous year's survey results), the influence of domestic wastewater is significant, but has yet to reach a conclusion. UoA plan to conduct water sampling surveys twice a year in 2022. Visual monitoring of the coast of Shiraho, 50m away from the UoA, was recorded on March 29, June 14, September 3, and December 6, 2021, and no problems such as wastewater leakage, foreign objects, mass die-off of organisms, or red tide were found, and there was no damage originating from the production area. Monitoring by the Ministry of the Environment and other organizations has shown that coral cover in neighboring waters has not changed over the years. The water quality analysis results of the Shiraho Coast showed no difference between the area near the facility and the control area, and did not fall far below the water quality guideline values for coral reef conservation. No problems were found in visual monitoring of Shiraho beach or in monitoring of wastewater quality. From the above, it can be concluded that it is quite unlikely that this farm is affecting the critical elements underlying the structure and function of the ecosystem to the point of causing serious or irreversible harm.	<ul style="list-style-type: none">— A map of Iriomote-Ishigaki National Park (area updated 15 Apr 2016, Ministry of the Environment)— The 13th ASC Target Plan (created by Euglena Co., 8th Dec. 2021)— Measurement certificate T-N, T-P, and COD (Okinawa Environmental Analysis Center, 21st Sep. 2021, 7th Nov. 2021)— Summary of water sampling analysis results (Prepared by Euglena, dated November 30, 2021)— Countermeasures for environmental impact from land areas (Emergency meeting on large-scale coral bleaching, April 23, 2017, Okinawa Prefectural Institute of Public Health and Environment)— Shiraho coast monitoring record (once every 3 months, such as 2021/2/6)	Target level	
	2.3 ETP species	a. Effects of the UoA on population/stocks within national or international limits, where applicable	Where national and/or international requirements set limits for impact on ETP species, the effects of the UoA on the population/stock are known and highly likely to be within these limits.	N/A	See Justification of the Target level.	Where national and/or international requirements set limits for impact on ETP species, the effects of the UoA and any other certified seaweed UoA on the population/stock are known and highly likely to be within these limits.	N/A	The ETP species assumed in the surrounding waters are corals, seaweeds, sea grasses, and sea turtles. Okinawa Prefecture Red Data Book, Marine Organism Red List by Ministry of the Environment, IUCN Red List, and other various survey results in the surrounding area were referenced. Species of seaweeds and sea grasses within the Ishigaki region are not considered ETP on the references mentioned before. There are 6 coral species which are listed as ETP species in Japan by Marine Organism Red List by Ministry of the Environment, but those have not been found in the sea area in front of the farm. About 5 km away from the UoA, algae of the genus <i>Sargassum</i> (Montagne, endangered (I-VU)) have been found in the waters near the mouth of the Shiraho Todoroki River, where red clay siltation is a problem. However, the drying out, wave exposure, bottom types and water depth are considered to be important limiting factors for seaweeds, and the possibility of being affected by the UoA is quite low. There are spawning sites of 3 endangered marine turtle species identified by the government of Japan and IUCN around Ishigaki Islands. Spawning of turtles are reported in the surrounding area, although it is not frequent. Based on the above, three potential ETP species can be specified: hawksbill turtle (<i>Eretmochelys imbricata</i>), loggerhead turtle (<i>Caretta caretta</i>), and green turtle (<i>Chelonia mydas</i>). There is no other certified seaweed UoA in the region so there is no combined effects on ETP species.	<ul style="list-style-type: none">— Okinawa Prefecture Red Data Book (Vol.3 for animals, 2017)— Okinawa Prefecture Red Data Book (Vol.3 for Fungi and Plants, Mar. 2018)— Okinawa Prefecture Red Data Book (Vol.3 for Marine Organism, Mar. 2018)— Red List 2020 by Ministry of the Environment (March 2020)— Marine Organism Red List by Ministry of the Environment (Mar. 2017)— IUCN Red List (revised July 2008, loggedhead turtle, 2017, green turtle, 2004)— Report on the 7th Basic Survey on Nature Conservation Shallow Water Ecosystem Survey (Seaweed Bed Survey) (September 2008, Biodiversity Center, Nature Conservation Bureau, Ministry of the Environment)— Report on Coral Reef Monitoring Survey in Iriomote Island National Park, Iriomote Island and Higashimura Waters (2020/2021, Biodiversity Center, Nature Conservation Bureau, Ministry of the Environment)— Ministry of the Environment Monitoring Site 1000 coral reef survey report from 2007 to 2017, sea turtle survey report (2015)— Sakurazaki Fisheries Research Institute: Spawning eggs of sea turtles in Yaeyama Islands and Ishigaki Island (1999)— JNVP Japan: Ishigaki-jima, Shiraho coast reef survey (seaweed and turtle surveys) (Mar. 2021)	N/A	

						Regarding the regulations on ETP species, there are several legislations such as Act on Conservation of Endangered Species of Wild Fauna and Flora, Protection and Control of Wild Birds and Mammals and Hunting Management Law, Nature Conservation Act, Natural Parks Act and Act on Protection of Cultural Properties. However, the company does not implement any activities that are subjected to regulations under these acts. Also, there is no limit for unintentional mortality of these turtle species by national laws or IUCN Red List. Therefore, this PI is not applicable.	<ul style="list-style-type: none">Act on Conservation of Endangered Species of Wild Fauna and Flora (revised 4th Jan. 2011)Protection and Control of Wild Birds and Mammals and Hunting Management Law (revised 14th Dec. 2019)Nature Conservation Act (revised 1st Jan. 2020)Natural Parks Act (revised 1st Dec. 2020)Act on Protection of Cultural Properties (revised 14th June 2021)			
	b. Direct effects	Known direct effects of the UoA are likely to not hinder recovery of ETP species.	Y	See justification of the Target level.	Direct effects of the UoA are highly likely to not hinder recovery of ETP species.	The illegal cultivation facility is located on the UoA property, and although the facility is located near the shore, it is clearly separated from the beach by the facility's perimeter wall. The UoA has no direct impact on the natural environment, and the presence of the facility does not prevent sea turtles from reproducing, as there is no suitable environment for sea turtle spawning within or adjacent to the facility. The UoA has installed minimal lighting on the landward side of the facility in response to requests from the community for security, but does not generate any light or noise that could affect sea turtle spawning. It has no direct impact on the ETP species as it has no direct impact on the marine or terrestrial natural environment. Therefore, it is quite likely that the direct impact of UoA will not prevent the recovery of ETP species.		Target level		
	c. Indirect effects	Do to target level			Indirect effects have been considered for the UoA and are thought to be highly likely to not create unacceptable impacts.	The limiting factors for sea turtles are degradation of spawning grounds, bycatch, and capture for food, and it is not expected that the wastewater stored in the ponds dug in the site and discharged into the surrounding waters through natural seepage will have any impact on sea turtles later. According to the Monitoring Site 1000 survey by the Ministry of the Environment from 2004, it was not observed that the number of spawning for the hawksbill turtle, loggerhead turtle, and green turtle had been consistently decreasing, although it is changing from year to year. There seems no significant change in the population of turtles, and there is minimal possibility of negative impact of the UoA, therefore, indirect effects have been considered for the UoA and are thought to be highly likely (Highly likely = > 80% 'like') to not create unacceptable impacts.	<ul style="list-style-type: none">Chonsei Prefecture Red Data Book (Ver.3 for animals, Mar. 2017)Chonsei Prefecture Red Data Book (Ver.3 for Fungi and Plants, Mar. 2018)Red List 2020 by Ministry of the EnvironmentMarine Organisms Red List by Ministry of the Environment (Mar. 2017)IUCN Red List (hawksbill turtle: 2008, loggerhead turtle: 2017, green turtle: 2004)Ministry of the Environment Monitoring Site 1000 (joint reef survey report from 2007 to 2017, sea turtle survey report 2015)Sakakura Fisheries Research Institute: Spawning eggs of sea turtles in Yeosu-Ulsan and Incheon Island (1999)WWF Japan: Ishigakima - Shikoku coast reef survey summary and results summary (Mar. 2012)	Target level		
	d. Management strategy in place	There are measures in place that minimise the UoA-related impact on ETP species, and it is expected to be highly likely to achieve national and international requirements for the protection of ETP species.	Y	See justification of the Target level.	There is a strategy in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to be highly likely to achieve national and international requirements for the protection of ETP species.	In order to minimize the impact on sea turtle breeding, the Natural Park Act and Coastal Act may have restrictions on vehicle access, but the UoA area is not subject to such restrictions. The UoA has installed minimal lighting on the landward side of the facility in response to requests from the community for security, but does not generate any light or noise that could affect sea turtle spawning. There is considerable potential for compliance with national and international requirements. Although it is highly unlikely that drained water is affecting ETP sea turtles, it is not directly drained, but it is temporarily stored in a pruned pond and discharged through natural infiltration. By this method, the possibility of influence on ETP species is minimized. In the protection method of the sea turtle, what is regarded as important and required is maintenance in the natural state of the coast. Since it is highly unlikely that drained water by infiltration will affect the coast, it also meets the protection requirements. There is a strategy in place for managing the UoA's impact on ETP species which is designed to be highly likely to achieve national and international requirements for the protection of ETP species.	<ul style="list-style-type: none">Ministry of the Environment: Sea Turtle Protection Handbook (revised Mar. 2007)	Target level		
		OR Where there are no requirements for protection and rebuilding provided through national ETP legislation or international agreements, there are measures in place that are expected to ensure the UoA does not hinder the recovery of ETP species.	N/A	See above.	OR Where there are no requirements for protection and rebuilding provided through national ETP legislation or international agreements, there is a strategy in place that is expected to ensure the UoA does not hinder the recovery of ETP species.	N/A	See above.	N/A		
	e. Management strategy evaluation	The measures are considered likely to work, based on plausible argument.	Y	See justification of the Target level.	There is an objective basis for confidence that the measures/strategy will work, based on information directly about the UoA and/or the species involved.	Y	Since monitoring of coral distribution, seaweed bed surveys, and results of sea turtle spawning surveys have not shown any decrease in habitat or spawning rates of ETP species in the vicinity of the facility have not been confirmed, the measures are effective. Therefore, there is an objective basis for confidence that the measures/strategy will work, based on information directly about the UoA and/or species involved.	Target level		
	f. Management strategy improvement	Do to target level			There is some evidence that the measures/strategy is being implemented successfully.		Measures mentioned above are taken.	Target level		
	g. Review of alternative measures to minimise mortality of ETP species	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species.	N/A	Not applicable. Measures are not needed because there is no identified influence on ETP species.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species and they are implemented as appropriate.	N/A	Not applicable because there is no death of ETP species caused by the UoA.	N/A		
2.4 Other species	a. Main species stock status	Main species are likely to be above biological based limits.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Main species are highly likely to be above biologically based limits.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Target level		
		OR If the main species are below biologically based limits, there are measures in place expected to ensure that the UoA does not hinder recovery and rebuilding.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	OR If the main species are below biologically based limits, there is either evidence of recovery or a demonstrably effective strategy in place between the UoA and any other certified seaweed UoAs which categorise these species as main, to ensure that they collectively do not hinder recovery and rebuilding.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Target level		
	b. Management strategy in place	There are measures in place, if necessary, which are expected to maintain or not hinder rebuilding of main species at levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	There is a partial strategy in place for the UoA, if necessary, that is expected to maintain or not hinder rebuilding of the main species at levels which are highly likely to be above the biologically based limits or to ensure that the UoA does not hinder their recovery.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Target level		
	c. Management strategy evaluation	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Target level		
	d. Management strategy improvement	Do to target level			There is some evidence that the measures/partial strategy is being implemented successfully.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Target level		
	e. Review of alternative measures	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main species.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main species and they are implemented as appropriate.	Y	UoA is an inland cultivating facility. No bycatch occurs and there is no impact on other species.	Target level		
2.5 Waste management and pollution control	a. Waste reduction	There are some measures in place that can help to reduce waste produced by the UoA.	Y	See justification of the Target level.	There is a strategy in place, which is expected to reduce waste produced by the UoA.	Y	Wastes generated from their facilities include below-the-standard products, harvested waste, waste liquid from failed culture, waste equipment and waste chemicals. The company has developed "A policy on waste treatment". The "The 13th ASC Target Plan" describes the process for reducing waste this year. For each waste, an annual plan for reduction activities are specified. The progress is recorded in the relevant meeting minutes. By December 2023, the company has set a target to reduce the amount of one or more types of industrial waste generated per unit of production compared to the fiscal year ended December 2022. In order to ascertain the amount of reduction, all waste on the site was once removed by the end of FY2021. In the future, the company will monitor the amount of waste per product by disposing of waste by type on a regular basis (twice a year, every six months). The monthly amount of industrial waste generated (by type) is also recorded. A record (manifest) of the disposal is kept. In the future, the status of achievement against the target will be reviewed, and subsequent actions will be considered, which is a measure that is expected to reduce waste. Measures are being taken that can be expected to reduce the amount of waste generated from UoA.	<ul style="list-style-type: none">Targeted action plan for one species (biodiversity) consideration, waste reduction, and energy reduction13th ASC Target PlanIndustrial waste disposal manifest	Target level	

		15. Chemicals and hydrocarbon wastes	There are some measures in place that can help to reduce chemical and hydrocarbon wastes produced by the UoA.	Y	See Justification of the Target level.	There is a strategy in place, which is expected to reduce chemical and hydrocarbon waste produced by the UoA.	Y	Most of the hydrocarbon waste originates from compressor oil. The company continues to extend the use-by-date by reducing the operating time of the compressor. Until now, they have improved the facility since 2011 and have reduced the amount of oil waste by about 24 liters per year. In the future, UoA will dispose of waste oil on a regular basis as described in the waste reduction measures above, and monitor the amount of waste oil disposed of, with the goal of reducing the amount of waste oil per unit of production. Monthly records of waste oil generation and disposal (manifest) are kept. Chemical substance is only used for quality inspection. Chemical is not used in production processes at all. Audit team concluded that there is a strategy in place, which is expected to reduce chemical and hydrocarbon waste produced by the UoA.	<ul style="list-style-type: none"> -A policy on waste treatment. -A manual on machine oil treatment. -Industrial waste disposal manifest -A manual on treating waste liquid from experimental laboratory. -Targeted action plan for rare species (biodiversity) consideration, waste reduction, and energy reduction. -The 13th ASC Target Plan. 	Target level	
		16. Chemicals and hydrocarbon spills	There are some measures in place that can help to prevent spills of chemicals and hydrocarbons originating from the UoA.	Y	See Justification of the Target level.	There is a spill prevention and response plan in place for chemicals and hydrocarbons originating from the UoA.	Y	There are "A manual on emergency measures in case of heavy oil spillage" and "A manual on treating waste liquid from experimental laboratory." Heavy oils are stored in a special container tank and managed so that no spillage can happen in normal usage conditions. The fuel oil tanks are inspected regularly. Monthly inspection records were checked. Chemicals that require liquid waste treatment is only used for quality inspection in the lab. Chemical is not used in production processes at all. Amount of chemical used is recorded every time chemicals are used. The remaining amount and records are cross checked every month. Waste liquids including the secondary cleaning solution are stored in a special container. When the waste liquid is returned to a specialized company for disposal, if chemicals spill into the laboratory, the procedure is to collect them using the installed adsorption mat. Audit team confirmed this situation during on-site audit. Regular training is provided on liquid waste disposal, etc. Training on how to respond to a heavy oil spill was provided on 6/21/2021 and on waste disposal on 12/17/2021. Training on reagent management and response to reagent leakage is provided every year, and the most recent training was conducted on June 28, 2021. There is a spill prevention and response plan in place for chemicals and hydrocarbons originating from the UoA.	<ul style="list-style-type: none"> -A manual on machine oil treatment. -Heavy oil tank inspection chart (Dec. 23, 2021, etc.) -A manual on treating waste liquid from experimental laboratory. -A manual on emergency measures in case of spillage of waste liquid from experimental laboratory and in case of fire. -Chemical storage record (e.g. July 15, 2021) -Reagent usage record (e.g. December 21, 2021) -Training records (17 Dec. 2021) -Treatment Procedure for Disease Infection (since November 15, 2018) 	Target level	
	2.6	Pest(s) and disease(s) management	A Spread of pest(s) and disease(s)	Y	See Justification of the Target level.	There is a strategy that is expected to prevent the spread of pest(s) and disease(s).	Y	There is a possibility that molds and other microorganisms may enter the culture pool and proliferate, but no bacteria or viruses that can infect Euglena or Chlorella itself have been confirmed to date, and there have been no cases reported outside the company. The culture solution is checked daily under a microscope during the production process, and any abnormalities can be detected. An inspection manual is available. If contamination or disease should occur, employees will heat sterilize and dispose of it. A "Treatment Procedure for Disease Infection" (dated November 15, 2018) has been documented as a measure in case pests and diseases should occur. The treatment procedure describes the disease infection of algae and the treatment flow in case of disease infection. The treatment flow included the chain of command from the time the abnormality is discovered and how it should be treated in the field. It was judged that the strategy is expected to prevent the spread of pests and diseases.	<ul style="list-style-type: none"> -A manual on machine oil treatment. -Heavy oil tank inspection chart (Dec. 23, 2021, etc.) -A manual on treating waste liquid from experimental laboratory. -A manual on emergency measures in case of spillage of waste liquid from experimental laboratory and in case of fire. -Chemical storage record (e.g. July 15, 2021) -Reagent usage record (e.g. December 21, 2021) -Training records (17 Dec. 2021) -Treatment Procedure for Disease Infection (since November 15, 2018) 	Target level	
	2.7	Energy efficiency	a. Energy use monitoring	Y	See Justification of the Target level.	There is evidence of energy use monitoring relative to production and ongoing effort to improve efficiency.	Y	There is evidence of energy use monitoring relative to production and ongoing effort to improve efficiency. The treatment flow included the chain of command from the time the abnormality is discovered and how it should be treated in the field. It was judged that the strategy is expected to prevent the spread of pests and diseases.	<ul style="list-style-type: none"> -A manual on machine oil treatment. -Heavy oil tank inspection chart (Dec. 23, 2021, etc.) -A manual on treating waste liquid from experimental laboratory. -A manual on emergency measures in case of spillage of waste liquid from experimental laboratory and in case of fire. -Chemical storage record (e.g. July 15, 2021) -Reagent usage record (e.g. December 21, 2021) -Training records (17 Dec. 2021) -Treatment Procedure for Disease Infection (since November 15, 2018) 	Target level	
		b. Maintenance records of equipment	There are maintenance records for equipment.	Y	See Justification of the Target level.	Maintenance records for equipment are up to date and available.	Y	There is a list of equipment that needs to be inspected (equipment maintenance and inspection table). Inspection records of boilers, spray driers, LPG tank, heavy oil tank etc are in place. Some equipment is checked every day, others are checked every month. Boiler inspection records and heavy oil tank inspection records were checked as samples. Up-to-date maintenance and servicing records for vessels, engines, and other equipment are available.	<ul style="list-style-type: none"> -A manual on machine oil treatment. -Heavy oil tank inspection chart (Dec. 23, 2021, etc.) -A manual on treating waste liquid from experimental laboratory. -A manual on emergency measures in case of spillage of waste liquid from experimental laboratory and in case of fire. -Chemical storage record (e.g. July 15, 2021) -Reagent usage record (e.g. December 21, 2021) -Training records (17 Dec. 2021) -Treatment Procedure for Disease Infection (since November 15, 2018) 	Target level	
	2.8	Translocation activity	a. Impact of translocation activity	N/A	UoA is an island culturing facility. Not applicable as there is no translocation of cultivated seeds.	The translocation activity is highly unlikely to introduce diseases, pests, pathogens, or non-native species into the surrounding ecosystem.	N/A	UoA is an island culturing facility. Not applicable as there is no translocation of cultivated seeds.		N/A	
		b. Translocation management strategy evaluation	There is a partial strategy in place that is expected to protect the surrounding ecosystem from the translocation activity at levels compatible with the translocation outcome target level of performance defined in SIsa (target level).	N/A	UoA is an island culturing facility. Not applicable as there is no translocation of cultivated seeds.	There is a strategy in place that is expected to protect the surrounding ecosystem from the translocation activity at levels compatible with the translocation outcome target level of performance defined in SIsa (target level).	N/A	UoA is an island culturing facility. Not applicable as there is no translocation of cultivated seeds.		N/A	
	2.9	Introduction of alien species	a. Management of alien species	N/A	Not applicable as the target species are not alien species.	There is a partial strategy in place to prevent progression of ecosystem impacts from occurring due to the presence of the alien species.	N/A	Not applicable as the target species are not alien species.		N/A	
Principle 3: Effective management	3.1	Legal and/or customary framework	a. Compatibility of laws or standards with effective management	Y	See Justification of the Target level.	There is an effective national legal system and a framework for cooperation with other parties, where necessary, to deliver management outcomes consistent with the Principles of this standard.	Y	Euglena and Chlorella are not subjected to resource management under any international cooperation schemes. In Japan there is no specific law regarding in land-based seaweed aquaculture facilities. The same legislations as for other food companies apply, e.g. Food Sanitation Act. With regard to the Water Pollution Control Act, only research facilities are subject to the Act, and land-based aquaculture facilities are not subject to the Act. This is an algae cultivation facility on the company's premises, the legislation is the same as normal food production facilities and it is not considered necessary for the company to work together with other parties. Management decision is made within the company.	<ul style="list-style-type: none"> -Water Supply Act (revised 1 Oct 2019) -Air Pollution Control Act (revised 1 April 2021) -Noise Regulation Act (revised 1 April 2016) -Vibration Regulation Act (revised 1 Aug. 2016) -Waste Management and Public Cleansing Act (revised 1 April 2020) -Fire Service Act (revised 1 Sep. 2021) -Industrial Safety and Health Act (revised 1 April 2020) -Food Sanitation Act (revised 1 June 2021) -Water Pollution Prevention Act (revised revised 1 April 2020) (not applicable). 	Target level	
									<ul style="list-style-type: none"> -Labor Standards Act (revised 1 April 2020) -Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment (revised June 2020) -Act on Employment Promotion etc. of Persons with Disabilities (revised June 2020) -Industrial Safety and Health Act (revised 1 April 2020) -Industrial Accident Compensation Insurance Act (revised 1 Sep. 2020) -Minimum Wage Act (revised 1 Aug. 2015) -Labor Union Act (revised April 2016) -Labor Contracts Act (revised 1 April 2020) 		
									<ul style="list-style-type: none"> -Fishery Act (revised 1 Dec 2020) -Code of Civil Procedure (revised 1 Oct 2020) -Act on the Promotion of Ainu Culture, and Dissemination and Enlightenment of Knowledge about Ainu Tradition, etc. (revised 1 Sep 2021) -Noise Control Act (revised 1 April 2016) -Odour Control Act (revised 1 April 2016) 		
									<ul style="list-style-type: none"> -Fishery Act (revised 1 Dec 2020) -Code of Civil Procedure (revised 1 Oct 2020) -Act on the Promotion of Ainu Culture, and Dissemination and Enlightenment of Knowledge about Ainu Tradition, etc. (revised 1 Sep 2021) -Noise Control Act (revised 1 April 2016) -Odour Control Act (revised 1 April 2016) 		

3.2 Decision-making processes	a. Objectives	Objectives to guide decision-making, which are consistent with achieving the outcomes expressed in the Principles of this standard, are explicit within the production unit specific management system.	Y	See Justification of the Target level.	Short and long-term objectives, which are consistent with achieving the outcomes expressed in the Principles of this standard, are explicit within the production unit specific management system	Y	Corporate philosophy of Yaeyama Shokusan are "to be a company that contributes to every one's health globally" and "to be a company that is in harmony with the beautiful nature of Okinawa". Specific plans: "Target plan for rare species (biodiversity) care, reducing waste and reducing energy consumption" and "Target and activities plan for Target and activities plan for corporate social responsibility and community relations" were prepared. Long-term goals until 2022 and short-term goals until 2019 have been created, and action plans for the goals have been implemented. Targets are updated as needed, and plans for the next fiscal year and beyond will be made based on progress by December 2022.	-Corporate philosophy of Yaeyama Shokusan -Corporate vision of Yaeyama Shokusan -Target and activities plan for rare species (biodiversity) care, reducing waste and reducing energy consumption; -Target and activities plan for corporate social responsibility and community relations. -The 13th ASC Target Plan	Target level	
							Principle 2 Outcome to be achieved: Rare species (biodiversity) consideration Long-Term target: By December 2022, reduce the amount of wastewater pollution load per unit of production compared to 2019 levels (October 2017 - April 2019). Outcome to be achieved: Waste reduction Long-term target: By December 2022, reduce the amount of one or more types of industrial waste discharged per unit of production compared to the year ended December 2022. Short-term target: By December 2022, identify the amount of waste per unit of production as the target for waste reduction. Outcome to be achieved: Energy reduction Long-term target: For the fiscal year ending December 2022 (January 2021-December 2022), reduce the amount of electricity, water, gas, or heavy oil used per production volume by an average of 3% or more of the amount used in the fiscal year ended September 2017.			
							Related to Principle 4: Achieving the outcomes: Social Responsibility for Employees Long-term objective / Short-term objective: Provide a workplace environment that takes safety and health into consideration, continue to update zero accidents record, go to work with a smile and go home cheerfully. Related to Principle 5: Achieving the outcomes: bring social benefits to the community Long-term objective / Short-term objective: Develop relationship by continuing regular communication while maintaining a relationship of trust with Shinhoh community that have been built since founding. From the above, Short and long-term objectives, which are consistent with achieving the outcomes expressed in the Principles of this standard, are explicit within the production unit specific management system.			
	b. Decision-making process	There are some decision-making processes in place that result in measures and strategies to achieve the production unit	Y	See Justification of the Target level.	There are established decision-making processes that result in measures and strategies to achieve the production unit specific objectives.	Y	The decision-making process is clear as the authority of each position is defined in the job authority regulations. Based on the results of interviews with managers and employees, it was confirmed that this process is operational. Therefore, decision-making processes respond to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	-Authority regulation	Target level	
	c. Responsiveness of decision-making processes	Specific decisions respond to serious issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take some account of the wider implications.	Y	See Justification of the Target level.	Decision-making processes respond to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	Y	Complaints and grievances about products will be handled according to clearly stated procedures. Health and safety issues are discussed by the Health and Safety Committee, and decisions are made by the board of directors as necessary. Board of Directors meetings are held once a month and are attended by Euglena's auditors and the executive officer in charge of finance. Managing directors' meetings are held weekly, and directors make decisions on medium- and long-term issues. Minutes of these meetings are recorded. Interviews with managers and employees confirmed that transparent and timely actions are taken according to the level of the problem. Therefore, decision-making processes respond to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	-Interview -Minutes of the Health and Safety Task Force Meeting (December 21, 2021) -Minutes of director's meetings	Target level	
	d. Use of precautionary approach				Decision-making processes use the precautionary approach and are based on best available information.	Y	Near-miss incidents report and Risk prediction training activities are used to prevent accidents. As an example of preventive measures, from the perspective of strengthening food defense, a protective fence has been installed on the west side of the facility and a temporary door has been installed on the sea side to prevent intrusion from the outside. Activities to prevent accidents during operations are continuing, and daily operations are being carried out to extend the accident-free record from 800 days to 1,200 days. Euglena Group has introduced the Motivation Crowd Survey, which is an anonymous questionnaire survey similar to an opinion box. Audit team confirmed that the company is proactively considering and implementing precautionary approach to avoid issues happening through the management interview and daily activity records.	-Near-miss incidents report (July 16, 2021) -Risk prediction training activity records (Nov. 26, 2021)	Target level	
	e. Accountability and transparency of management system and decision-making process	Some information on the production unit's performance and management action is generally available on request to stakeholders.	Y	See Justification of the Target level.	Information on the production unit's performance and management action is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring evaluation and review activity.	Y	In summary, the decision-making process uses a precautionary approach based on the best available information. There has been no request of the information from stakeholders. Website of Euglena Co., Ltd is used to communicate news release. The website is also used to communicate research reports about Euglena. The status of corporate governance, including that of its subsidiaries, is available from Euglena. If requested by stakeholders, information can be available excepting confidential information of business. The production process at Yaeyama Shokusan is disclosed on the website. It is disclosed that Euglena and Chlorella isolates are cultivated in land-based facilities, so that stakeholders can confirm that the company is not engaged in activities that affect the sustainability of resources. Information on the production unit's performance and management action is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring evaluation and review activity.	-website of Euglena Co., Ltd. http://www.euglena.jp/news/release/ http://www.euglena.jp/research/ https://www.euglena.jp/companyinfo/sustainability/governance/	Target level	
	f. Approach to disputes	Although the management authority or production unit may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability of the production unit.	Y	See Justification of the Target level.	The management system or production unit is attempting to comply in a timely fashion with judicial or administrative tribunal decisions arising from any legal challenges.	Y	There have been no cases of complaints or lawsuits related to the target level. Inquiries are handled appropriately and recorded. Yaeyama Shokusan has developed a complaint handling procedure, and when complaints are received, they are handled according to the procedure.	-Complaint Handling Procedure (May 31, 2021)	Target level	
3.3 Compliance and enforcement	a. MCS implementation	Monitoring, control and surveillance (MCS) mechanisms exist, and are implemented in the production unit and there is a reasonable expectation that they are effective.	Y	See Justification of the Target level.	A monitoring, control and surveillance system (MCS) has been implemented in the production unit and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	Y	With regard to laws, the board of directors prepares a self-check list and the person in charge confirms the laws to be complied with. Internal audits are conducted for the Euglena Group, and Yaeyama Shokusan also undergoes internal audits every few years (most recently in 2019). The company has been audited by an external certification body and is ISO 22000 certified. The status of corporate governance, including that of its subsidiaries, is available from Euglena. Regulatory compliance is always confirmed by regulatory authorities such as the country, Okinawa prefecture, Ishigaki city etc. Therefore, a monitoring, control and surveillance system (MCS) has been implemented in the production unit and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	-website of Euglena Co., Ltd. http://www.euglena.jp/companyinfo/sustainability/governance/ -self-inspection sheet -internal audit records of Euglena Group (2019) -ISO 22000 certification audit report (Oct. 8, 2021).	Target level	

		b. Sanctions	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Y	See Justification of the Target level.	Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.	Y	Any nonconformity in Yuyama Shokusan's self-inspection chart, annual internal audit records, and ISO 22000 audits is appropriately addressed. At the weekly Food Safety and Sanitation Committee meeting, the person in charge takes action, and the improvement status is checked with the improvement action management confirmation form. Penalties are stipulated in the various laws described in 3.1. For example, according to the Waste Management and Public Cleansing Act, in the case of a violation, up to five years imprisonment or a fine of ten million yen or less may be imposed. In the case of a violation of the Labor Standards Act, imprisonment for not less than 1 year and not more than 10 years, or a fine of not less than 200,000 yen and not more than 3 million yen. Although there have been no cases in which the Company violated laws and regulations and penalties have been imposed, as mentioned above, Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.	--self-inspection sheet --internal audit records of Euglena Group (2019) --ISO 22000 certification audit report (Oct. 8-9 2021).	Target level	
		c. Compliance	Production units comply with the management system under assessment, including, when required, providing information necessary for effective management.	Y	See Justification of the Target level.	Some evidence exists to demonstrate production units comply with the management system under assessment, including, when required, providing information of importance to the effective management of the production unit.	Y	Compliance with the internally established management system was confirmed through Implementation plan, its implementation records and interviews with employees. The management system is about internal corporate activities and not about wild resource management. So authorities (Ishigaki City and Okinawa Prefecture) has not requested any information about seaweed production. Therefore, some evidence exists to demonstrate production units comply with the management system under assessment, including, when required, providing information of importance to the effective management of the production unit.	--self-inspection sheet --internal audit records of Euglena Group (2019) --ISO 22000 certification audit report (Oct. 8-9 2021).	Target level	
		d. Systematic non-compliance				There is no evidence of systematic non-compliance.	Y	As a result of document review and interviews with managers, employees, Ishigaki City Hall, and local residents, no evidence of planned non-compliance was found.	--Interview	Target level	
Principle 4: Social responsibility	4.1 Child labour	a. Child labour	No incidences of child labour or young worker abuse are found to have occurred.	Y	a. A list of employees which include birth dates were checked. No worker was under 18 years old. Company only employs workers above 19 who has graduated high school. At the time of selection, the applicant's age is verified by self-reporting on the resume, and at the time of employment procedures, the applicant's age is verified by residence certificate or visa. b. c. Labor Standard Act of Japan states "Employers shall not employ children until the end of the first 31st of March that occurs on or after the day when they reach the age of 15 years". During site audit, no worker under 18 was observed. The employee and stakeholder interviews did not confirm any incidence of child or juvenile labor. Therefore, it can be concluded that young workers were not engaged in unsuitable hard work, night work, or dangerous work. No incidences of child labour or young worker abuse are found to have occurred.	There is evidence that the risk of child labour and young worker abuse has been minimised.	Y	a. b. "Employment and Workplace Policy" (Revised on May 19, 2021) states that the company does not employ workers under 18 years old and no child labour is used. This policy is kept in a company folder and can be viewed by anyone at any time. Public document(Certificate of Residence) is required to prove the age when employing. So there is no possibility of employing workers under 18 years old in the future either. The company also does not employ high school students (16-18 years old) on a part-time basis. Therefore there is evidence that the risk of child labour and young worker abuse has been minimised.	--Employment and Workplace Policy (revised May 19, 2021) --Staff Directory (June 1, 2021) --Organization Chart (April 1, 2021)	Target level	
	4.2 Forced, bonded or compulsory labour	a. Incidences and risk of forced, bonded or compulsory labour	No incidences of forced, bonded or compulsory labour are found to have occurred.	Y	a. "Employment and Workplace Policy" states that the company does not get involved in forced, bonded or compulsory labour. b. A contract is signed at the time of employment with the consent of both the employer and the employee, and the employee understands the contents of the contract. c. During the employee interview, it was confirmed that there was no pre-employment paid training. d. During the employee interview, it was confirmed that the original identification documents are not kept by the employer. It was confirmed that copies of the required certificates were kept on file. e. Employment regulation section 17 specifies that employees are free to leave work at their own will. It was also confirmed by interview to employees. f. Interviews with employees confirmed that there is no seizure of salary, benefits, or property to prevent workers from resigning. g. In Article 21 of the Employment Regulations, rest periods for workers are clearly stated. Interviews with workers confirmed that workers are free to leave the workplace and spend time freely outside of work hours. No forced (trafficking), bonded, or bonded labor has occurred.	There is evidence that the risk of forced, bonded or compulsory labour has been minimised.	Y	a. "Employment and Workplace Policy" states that the company does not get involved in forced, bonded or compulsory labour. b. The "Employment and Workplace Policy" is kept in a shared folder where documents used in morning meetings are kept, and all employees are able to check it. c. "Employment and Workplace Policy" clearly states that forced, bonded or compulsory labour is not allowed, and a consultation hotline was also set up. Information on how to access the consultation hotline is posted in places where employees can see it (break areas, restrooms, etc.). d. It was confirmed through interviews with employees that the information on the consultation hotline was made known to them. Based on the above, it was determined that the risk of forced, bonded or compulsory labour was minimized.	A list of employees (latest ver.2021/06/01) --Employment regulations (revised on April 26, 2019) --Employment and Workplace Policy (revised May 19, 2021)	Target level	
	4.3 Discrimination	a. Incidences and risk of discrimination	No incidences of discrimination are found to have occurred.	Y	a. Labor contracts for all employees are kept. There is a salary list for all employees and a record of salary increases. The results of training are recorded in the "Training Plan". As an example, the training record of February 15, 2021 was reviewed. b. Interviews with workers confirmed that there was no discrimination based on country of origin, religion, disability, gender, sexual orientation, union membership, political party affiliation, or age during and after employment. c. Records on hand workers are kept for at least six months. d. Worker interviews confirmed that there is no discrimination or intervention related to gender, union membership, or other human rights. e. Information on where to send complaints (Internal, Group, and external audit committee members) is posted on the internal bulletin board. Interviews with managers and workers confirmed that there was no evidence of past instances of discrimination. In summary, the company has policies in place to ensure that workers are not discriminated against.	There is evidence that the risk of discrimination covering all aspects of potential discrimination has been minimised.	Y	a. "Employment and Workplace Policy" states that the company does not discriminate workers due to their national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or age. Contact details in case of discrimination and harassment is also specified. "Complaint resolution procedure" summarizes procedures to address complaints. b. Information on the consultation hotline is posted in places where employees can see it, such as break areas and restrooms, and opinion boxes where employees can post their opinions have been available in the facility since April 2018. In addition, the company plans to renew and distribute "Euglena Group Hotline" cards containing information on the consultation hotline. When a complaint is received from an employee, it will be dealt with in accordance with the reporting flow in the crisis management regulations. At Yuyama Shokusan, the procedure is to consult with the executive board, the board of directors, or the Euglena head office. At Euglena Head Office, the person in charge determines the flow of subsequent reports. The Audit Committee of Euglena Head Office (three external audit committee members, including a legal expert) audits whether the response is appropriate. The "Employment and Workplace Policy" is stored in a shared folder containing documents that are referred to by employees at morning meetings, and is available for all employees to review. Training is conducted once a year to improve employees' knowledge on harassment, and the most recent record of the training conducted on February 5, 2021 was reviewed. The training materials are e-learning materials from an external organization. The training is conducted using e-learning materials from an external organization. As a general rule, all employees are eligible for the training, and the materials are shared with employees who did not attend on the day of the training. There is evidence that the risk of discrimination has been minimized.	--A list of employees (latest ver.2021/06/01) A list of employees (latest ver.2021/06/01) -- Training plan (FY2021) --Employment and Workplace Policy (revised May 19, 2021) --Complaint Handling Procedures (dated May 31, 2021) --Opinion Box (suggestion box) --Interview to employees --Education and Training Implementation Record (February 5, 2021) --Attendance sheets for harassment training --Harassment training materials -- complaint resolution procedure --a box to collect opinions of workers	Target level	
4.4 Health, safety and insurance	a. Safe and healthy working and living environment for workers	The employer provides a safe and healthy working and living environment (where accommodation is provided) for workers.	Y	a. "Safe and healthy work specification" has been developed including working procedures, tasks, critical aspects and risks related to each section of seed cultivation, indoor culture, harvesting and drying and quality control. It also includes possible accidents and incidents, as well as necessary PPE. The specification is kept in the office of each section so that any one can see it. b. A manual on emergency measures in case of fire and a manual on emergency measures in case of spillage of waste liquid from experimental laboratory and in case of fire are also in place. c. Health and safety work standards are updated annually. Risk assessments are conducted for each task, and warnings are posted at points where risks are assumed, so that employees can avoid risks by confirming the precautions before performing the task. The status of implementation is also checked by the manager. The status of the implementation of risk confirmation measures is also checked by the manager. In addition, heat index check monitors were installed at several locations, and employees were instructed to take a rest every 20 minutes if there was an increased risk of heat stroke. Safety parties are conducted every month with all employees taking turns to identify and eliminate hazards and risks in the working environment on an ongoing basis. d. No accommodation facility. Each section has rest stations where workers can have meetings, carry out ad-hoc works, take a rest and take meals. The toilets were kept clean and safe. e. During the site audit, no critical danger was identified throughout the whole production processes. Emergency exit routes map is in place and workers are instructed to follow the route in case of evacuation. A record of a tsunami evacuation drill (conducted on March 10, 2021) was confirmed. The drill was based on a scenario assuming an evacuation, and a map with the evacuation site identified was confirmed. On the day of the drill, the participating employees walked to the evacuation site, and the emergency evacuation route was made known to the employees. f. Water servers have been installed in the rest areas of each department, and safe drinking water is provided by the company, as well as barley tea and salted candy to prevent heat stroke. a. Safety and health work standards specify the tools and protective equipment for each task. Appropriate protective equipment (helmets and rain boots for all employees, ear muffs, goggles, gloves, arm covers, and safety shoes for those in charge of the relevant work) is provided by the company according to the work content of each department, and the items are managed according to the protective equipment management list. Workers' proper use of protective equipment was confirmed through site inspections and interviews with workers. The manager checks the status of the workers' use of these protective equipment during his monthly inspection of the plant. There are posters at the work site at various points instructing workers to wear protective equipment such as earplugs, protective caps, and helmets. The employer provides a safe and healthy working environment for workers. Accommodation is not provided.	No target specified for this PT. It maximum in rest the target should be considered over.		--Safety and health work standards (revised July 1 2021) --A manual on emergency measures in case of heavy oil spillage --Emergency Response Procedures (revised June 1, 2021) --Emergency exit route map --Emergency Contact Flow --Interviews --On-site review --Evacuation drill record (March 10, 2021) --Safety patrol implementation record (March 31, 2021) --Protective equipment management list (December 7, 2021)	Met			

	h. Health and safety records and corrective action	There is evidence that health and safety related accidents and violations are recorded and corrective action is taken when necessary. No immediate and serious dangers to personnel health or safety were identified.	Y	It was confirmed that the details of the accident, its cause, and the analysis of the cause were described in the "Accident Report" and that countermeasures were taken to prevent recurrence. During the site audit, no critical danger was identified throughout the whole production processes. There is evidence that health and safety related accidents and violations are recorded and corrective action is taken when necessary. No immediate and serious dangers to personnel health or safety were identified.	Hazards to personnel health and safety are known. Accidents are analysed for root causes. The root causes are addressed and remediated to prevent future accidents of a similar nature. All incidences including minor accidents are included. Records are complete and accurate.	Y	<ul style="list-style-type: none">There was an "Accident Occurrence Report" for the case that was covered by the industrial accident insurance, and the "First Aid Response Report" recorded details such as the circumstances of the accident, the results of the analysis of the direct cause and the plan to implement emergency and permanent measures, the 4th analysis of the indirect cause and the plan to implement emergency and permanent measures, and the results of the emergency and permanent measures.Even minor accidents and violations are recorded in the "Accident Occurrence Report", which includes an analysis of the root cause of the accident and a description of remedial measures.A minor accident occurred on December 6, 2021. Sparks from welding work ignited fuel oil waste that was covered by a fireproof sheet, causing it to smoke. The incident did not result in a fire, and no injuries or damage to property occurred. A report on the occurrence of a minor accident was drawn up, and it was confirmed that the cause of the accident had been analysed and preventive measures for the future had been considered.For minor risks that did not lead to an accident, the risk finder prepares a near miss accident report and reports to the person in charge of safety measures. The contents of a building was found to be deteriorated (July 16, 2021). A forklift passed over a marble core and broke some of the covers (September 28, 2021). In both cases, it was determined that safety measures were necessary, and a "Report on Improvement of Unstable Areas" was drawn up, and measures were taken.Hazards to personnel health and safety are known. Accidents are analysed for root causes. The root causes are addressed and remediated to prevent future accidents of a similar nature. All incidences including minor accidents are included. Records are complete and accurate.	<ul style="list-style-type: none">Minor accident report (occurred on December 6, 2021)First aid response reportNear-miss accident report (September 29, 2021)	Target level
	c. Occupational health and safety assessment and personnel training	There is evidence that personnel are trained effectively on health and safety topics related to their role, responsibilities and activities.	Y	It was confirmed with "13th Training plan/implementation chart (for FY2021)" that there are plans for maintaining and enhancing knowledge and skills of workers regarding safety and health for each section as well as records of past training.	Formal and regular training courses are undertaken. Risk assessments are documented and/or certified. Personnel are appointed to apply health and safety risk assessment, which may include an overseas management committee, first aiders and/or fire marshals. Special risks associated with changing workplace or worker condition, such as expectant mothers, will have due consideration.	Y	<ul style="list-style-type: none">The Safety Committee and the Health Committee were merged into the Safety and Health Committee in FY2022. The annual activity plan of the Health and Safety Committee is prepared every year."Annual Safety and Health Conference" is organized in which, task prediction meeting, First-aid training by outside instructors and events to promote safety etc. are arranged to raise awareness of safety and health among workers. The record of the training is kept in the company records.The Health and safety committee and the health and safety task force meeting for reporting to the directors are conducted once a month. The minutes of the meeting (December 21, 2021) were confirmed.The training items necessary for the work are set for each section, and the annual training schedule is planned and implemented.As part of the risk prediction training, the company instructs employees to prepare a near miss accident report for risks that did not lead to an accident and report it to the person in charge of safety measures.All employees take turns to participate in monthly safety patrols. Patrols by the health and safety committee are conducted about once every two months.Risk assessment of each work is conducted as a risk prediction training and team action goals are set. The safety and health work standards are updated annually as necessary.The "Basic Policy for Safety and Health Activities" has been prepared, and was reviewed and updated on September 2, 2021.Health and safety newsletters are distributed to employees on a quarterly basis. In the summer, the company informs employees about measures against heat stroke.Health and safety office and chain of command are clearly indicated in the organization chart. An emergency response procedure manual has been prepared, and the response flow and person in charge for various events have been determined.Safety and Health Committee are organized. Each section has committee members. Committee is held at least once a month.A firefighting plan has been prepared and training periods have been set. Training is conducted as needed in the areas of firefighting, evacuation, reporting, emergency response, and general training. The training is conducted on November 9, 2021 was reviewed.All employees are equipped with fire extinguishers and diagrams of evacuation routes. Fire equipment inspections are conducted in every February and August, and it was confirmed that fire extinguishers are replaced.	<ul style="list-style-type: none">Organization chart for safety managementFlow chart for safety managementBasic Policy for Safety and Health Activities (May 13, 2019)Working procedures for health and safety (March 28, 2019)The 13th Education Plan / Implementation Table (for 2021)Safety patrol implementation record (March 31, 2021)NYT (based on prediction activities) implementationReports (February 25, 2021; April 8, 2021; July 16, 2021; September 29, 2021)Organization chartEvacuation drill report (conducted on March 30, 2021)Basic Policy for Safety and Health Activities (September 2, 2021)Safety and Health News (January 2022)Near miss accident report (March 16, 2020)Emergency response procedureFirefighting planFire Fighting Training Record (November 9, 2021)Fire extinguisher inspection recordAnnual activity plan of the Safety and Health CommitteeMinutes of Safety Committee meeting (June 2021)Minutes of the Health Committee Meeting (June 2021)Minutes of the Safety and Health Task Force Meeting (December 21, 2021)	Target level
	d. Organisation responsibility and insurance provided for personnel accident or injury	No incidences of workers having to cover their own work-related medical expenses.	Y	The company bears the medical expenses incurred during work.	Organisation is responsible and there is proof of insurance (accident or injury) for personnel medical costs in a job-related accident or injury, unless otherwise covered. This includes all seasonal workers.	Y	<ul style="list-style-type: none">Employment regulation section 9 specifies that the company is to compensate for any work-related medical expenses. Audit team confirmed that all workers including temporary employee and part-time workers are covered by the workers' accident compensation insurance as well as additional optional accident insurance that the group makes use of.Yayama Shokusan's application for labor insurance filing had been received on August 27, 2020.Since the employee injured in the 2021 accident belonged to Eugenia, Eugenia's head office handled the work accident insurance coverage.Therefore, organization is responsible and there is proof of insurance (accident or injury) for personnel medical costs in a job-related accident or injury, unless otherwise covered.	<ul style="list-style-type: none">Employment regulation (Revised on April 26, 2019)Work-related accident compensation regulationReport of application of workers' accident compensation insurance (Aug. 27, 2020)	Target level
4.5 Fair and decent wages	a. Fair and decent wages	The organisation pays at least the legally required minimum wage. Deductions in pay for disciplinary actions are not allowed and payments are made in a manner convenient to workers.	Y	<ul style="list-style-type: none">a. Minimum wage can be checked by visiting the website of Health, Labour and Welfare Ministry (Ministry Labour Office). Audit team confirmed that the managers acknowledged the current minimum wage.b. Audit team confirmed that the company keeps employment contracts, Wage ledger, working hours records.c. Minimum wage of Okinawa Prefecture was 620 yen / hour (as of 1st Oct 2021). Employment contracts and wage ledger for the previous 12 months were checked and it was confirmed that wage level was set well above the minimum wage and all workers were paid with higher wages than minimum wage.d. Wages and allowances were paid by bank transfer, and it was confirmed through worker interviews that no inconvenience had been caused by the method of payment.	The organisation pays a living wage and there is no labour-only contracting relationship.	Y	<ul style="list-style-type: none">a. The expenditures necessary for a single employee to lead a minimum standard of living (including general rent, utilities, communication, food, medical, clothing, transportation, and entertainment expenses) were estimated, and it was documented as "Living on a Minimum Annual Income". At Yayama Shokusan, even the lowest starting salary level (including bonuses) is well above this minimum living wage, so it was confirmed that the salary meets the living wage.Wage is decided based on the methodology specified in employment regulation section 6 "Wage". Based on annual performance evaluation, wages for each worker is decided every year.b. It was confirmed with workers' list and employment contract that labour-only contracting arrangements, consecutive short-term contracts or false apprenticeship or other schemes to avoid meeting its obligations to personnel under applicable laws and regulations pertaining to labour and social security do not take place. Worker interviews confirmed that there was no such thing as an false apprenticeship programs.	<ul style="list-style-type: none">website of Health, Labour and Welfare Ministry (Ministry Labour Office)Employment Regulations (Revised on April 26, 2019)Staff Directory (June 1, 2021)Labour contractWage ledgerWorker interviews (January 11-12, 2022)Living on a minimum annual income (May 31, 2021)	Target level
	a. Freedom of association and collective bargaining	There are no incidences of the production unit restricting worker access to associate or bargain collectively.	Y	Japanese law and custom allow for a reduction in salary as one method of disciplinary action. For this reason, Yayama Shokusan has included a pay cut as one of the disciplinary measures in its employment regulations. However, based on past disciplinary records and interviews with managers, it was confirmed that there have been no cases of pay cuts in the past at Yayama Shokusan and that such measures will not be taken in the future. In addition, Yayama Shokusan issued written policy "How to treat the employment regulation about deductions in pay for disciplinary actions." It clearly stated that the company would not deduct in pay for already completed labour as disciplinary actions. Future salaries may be changed with the consent of workers, but this is not deductions in pay for disciplinary actions.	There is evidence that the risk of restrictions to freedom of association and collective bargaining has been minimised.	Y	<ul style="list-style-type: none">Under the current system of the company, two copies of the notice of working conditions and consent form must be prepared, signed by the company and the employee, and kept one copy each, but the status of the labor contract kept by the employee is unclear. The company plans to check the status of the labor contract and distribute another copy if the employee replies that they do not keep it.	<ul style="list-style-type: none">Employment Regulation section 6 (Revised on April 26, 2019) (Types and methods of disciplinary action)How to treat the employment regulation about deductions in pay for disciplinary actions (By Yayama Shokusan, Nov-2018)	Target level
4.6 Freedom of association and collective bargaining	a. Freedom of association and collective bargaining	There are no incidences of the production unit restricting worker access to associate or bargain collectively.	Y	<ul style="list-style-type: none">a. Labor union constitution is in place. The list of trade union members (August 13, 2020) was confirmed. Labor union has been established and in operation. Confirmed with employee.b. Audit team confirmed that the company management does not restrict access to association and collective bargaining and allows the union to use the conference room and company email through interview to workers.c. Audit team confirmed that the labor union can directly access all workers freely through interview to workers.	There is evidence that the risk of restrictions to freedom of association and collective bargaining has been minimised.	Y	<ul style="list-style-type: none">Employment and Workplace Policy (Revised on May 19, 2021) specifies that the company does not restrict workers from joining unions, political parties and other parties except in case of unauthorized secondary occupation.Training is conducted once a year to improve staff's knowledge of harassment, and the most recent record of the training conducted on February 5, 2021 was reviewed. E-learning materials from external organizations are used for the training. There was a training on "Prevention of abuse, harassment and abusive disciplinary practices" at Eugenia Co., Ltd. Most management staff participated online. Those who could not participate as well as all the other employees watched a video recording of the training. The company is making great effort to promote the policy on preventing harassment and abusive disciplinary practices.The consultation and help desk for harassment, discrimination, and abusive disciplinary practices is clearly stated and posted in places where employees can see it, such as the company website.The "Grievance Procedure" outlines the procedures for responding to complaints and confirms the policies and methods for addressing any problems.	<ul style="list-style-type: none">Labour Union Yayama ShokusanList of Yayama Shokusan Labor Union Members (April 1, 2020)Employment and Workplace Policy (Revised on May 19, 2021)Interview to worker	Target level
4.7 Disciplinary practices	a. Disciplinary practices	There is a policy in place to ensure against abusive disciplinary practices. No incidences of tolerated abuse have taken place.	Y	<ul style="list-style-type: none">a. Disciplinary actions are clearly defined in Chapter 7 "Award and Punishments" of the Employment Regulations, and are conducted fairly in accordance with the regulations. Audit team confirmed through interview to managers and workers that disciplinary practices are implemented in a fair way and there is no case of abuse (physical, verbal or mental) and punishment.b. Employment and Workplace Policy (Revised on May 19, 2021) specifies that the company does not carry out or support abusive disciplinary practices which include physical and mental abuses.c. Confirmed through interview to managers and workers that the company does not carry out or support abusive disciplinary practices which include physical and mental abuses.d. The Employment and Workplace Policy is kept in a shared folder for all employees to refer to, and the contents are made known to all.	The risk of potential abuse around discipline have been minimised. There are clearly outlined procedures to raise, file and respond to a complaint of abuse in an effective manner. Management and workers are clear on the policy and procedures. Training is provided to supervisors on acceptable disciplinary measures.	Y	<ul style="list-style-type: none">a. There has been no reported harassment in the past. There were no new cases of disciplinary action. There are personnel charges due to business reasons. Interview to workers demonstrated that there was no sign of harassment or abusive disciplinary practices.Training is conducted once a year to improve staff's knowledge of harassment, and the most recent record of the training conducted on February 5, 2021 was reviewed. E-learning materials from external organizations are used for the training. There was a training on "Prevention of abuse, harassment and abusive disciplinary practices" at Eugenia Co., Ltd. Most management staff participated online. Those who could not participate as well as all the other employees watched a video recording of the training. The company is making great effort to promote the policy on preventing harassment and abusive disciplinary practices.The consultation and help desk for harassment, discrimination, and abusive disciplinary practices is clearly stated and posted in places where employees can see it, such as the company website.The "Grievance Procedure" outlines the procedures for responding to complaints and confirms the policies and methods for addressing any problems.	<ul style="list-style-type: none">Grievance Procedure (May 31, 2021)Employment and Workplace Policy (Revised on May 19, 2021)Education and Training – Implementation Record (February 5, 2021)Attendance sheets for harassment trainingHarassment training materialsEmployment Regulations (revised April 26, 2019)Regulations of Disciplinary Reduction of Wages (November 5, 2018)Worker interviews	Target level

	4.8 Working hours	a. Working hours	The organisation abides at least to the legally required working and overtime laws. All overtime is voluntary.	Y	a. Yayama Shokusan uses an IC card system to record employee attendance and leave time. It was confirmed that monthly working hours were stored in the data. b. Work regulations, working hour records, and worker interviews confirmed compliance with laws regarding working hours. c. Timecard records of working hours, wage ledgers, and interviews with workers confirmed that overtime only occurs in exceptional circumstances, is voluntary, and is paid on a premium basis. Yayama Shokusan complies with legal working hours and overtime. All overtime work is voluntary.	The organisation abides by industry norms. Overtime is not regular. Workers are provided with at least one day off following every six consecutive days of working.	Y	Working hours are clearly specified in employment regulation section 4 "Work". Working hours during week days are 7 hours 20 min. Working hour on Saturday is 3 hours 20 min. The workweek is set at 40 hours per week. The company is currently working eight hours per weekday and taking two days off per week as a trial period, and plans to revise the work rules if there are no problems. There are sections which employ three shifts around the clock. Shift work is also specified in the work rules and in the notice and acceptance of working conditions. The working conditions notice and consent form states that the prescribed weekly working hours are 40 hours or less. a. Audit team confirmed with time card, working hour records, wage ledger and interview to workers that working hours do not exceed 48 hours a week and overtime of 12 hours a week, complying international standard. Basically, all employees have two days off per week now, but some departments have only two Saturdays off per month, while others have to work an hour or two on their days off during the production season. The Harvesting and Drying Section operates 24 hours a day during the peak harvest season, and works three shifts, starting on Sunday nights. Basically, there is no overtime work, but since the working hours are calculated according to the IC card imprinting, it is expected that there will be about 30 minutes of overtime work per day, 15 minutes each before and after the start of work. Therefore, if the overtime exceeds 12 hours per month, the manager will check the reason with each employee. If they work more than one hour of overtime per day, they also check the reason. Work hour records are submitted to a subcontractor for payroll calculation. The department head first checks if the working hours are appropriate, and then the general affairs department checks. The general affairs department also confirms whether the payroll is correct or not. From the interviews with managers and the work data, it was confirmed that the longest overtime hours are about 20 hours per month, and most employees work about 5 hours per month. Also checked the attendance schedule since the last audit onwards and confirmed that there are no seven consecutive workdays. b. c. Since it is completely produced on land, no work is done at sea. Therefore, the organisation abides by industry norms. Overtime is not regular. Workers are provided with at least one day off following every six consecutive days of working.	--Employment regulations (revised on April 26, 2019) --Wage ledger (for December 2021) --Interview to workers --Working hours record (Mar. 2021) --Work Schedule	Target level	
	4.9 Environmental and social training	a. Environmental awareness and training	Information is delivered to production unit workers about environmental and social issues included in this standard such as disposal of waste, and prevention and management of chemical and hydrocarbon spills, grievance procedure.	Y	a. b. Regarding waste treatment, prevention and management of chemical and hydrocarbon spills, waste liquid treatment is instructed in the safety and health procedure manual. If there is a change of personnel or joining of the team, coach them to carry out their duties. Training is provided through On the Job Training, and the necessary education is planned and implemented every year. Training on liquid waste collection was incorporated in the 13th training plan/implementation schedule for FY2021, and it was confirmed that the liquid waste collection was completed on February 15, 2021. The effectiveness of this training was confirmed on April 6, 2021. In addition, a record of training and emergency response procedures for handling reagents and liquid waste was confirmed to have been conducted on June 26, 2021. Employee interviews also confirmed that the procedures for liquid waste collection were being followed, health and safety rules were posted in all work areas where chemicals are handled. Confirmed that the training on AEC certification was conducted on June 22, 2021. The overview, the requirements of each principle, and the details of the company's implementation were disseminated, and included the contents of standards related to society, such as procedures for handling problems. There is a complaint handling procedure for external complaints received by Eugenia Co. and its group companies. If the responding department can handle the complaint on its own, the department in charge handles the complaint, including liaison with the complainant. If the responding department finds it difficult to handle the complaint on its own, it will form a complaint response group that includes multiple departments within the company to consider and handle the complaint. In relation to safety, hygiene, harassment, and building relationships with the local community, the company has created goals and action plans regarding social responsibility for employees and relationships with the local community.	There is evidence of environmental and social awareness and training, in production unit workers, sufficient for them to properly dispose of waste, and prevent and manage chemical and hydrocarbon spills, or to lodge a grievance.	Y	a. The necessity of education and specific details of implementation are described in the Basic Policy for Safety and Health Activities (September 2, 2021). The "13th Education Plan and Implementation Table (for 2021)" was confirmed. The record of planning necessary education for each department every year, checking its effectiveness, and managing its progress was confirmed. This is confirmed twice a year. In addition, the department head makes a plan for each person to obtain necessary qualifications for their work and promotes the acquisition of qualifications. Competence value targets are being managed. b. Interview to workers demonstrated that the company is proactively providing opportunities for workers to obtain necessary qualifications or participate in appropriate training depending on the work of workers. c. Regarding waste treatment, prevention and management of chemical and hydrocarbon spills, operation procedures have been developed. Workers demonstrated good understanding of the procedures and the procedures are already in use in the every day operation. It was confirmed on site that all reagents were stocked and managed using the inventory record sheet. Confirmed that the training on AEC certification was conducted on June 22, 2021. The overview, the requirements of each principle, and the details of the company's implementation were disseminated, and included the contents of standards related to society, such as procedures for handling problems.	--Basic Policy for Safety and Health Activities (September 2, 2021) --Interviews with workers --13th training plan/implementation schedule (for 2021) --Safety and health work standards (revised on July 1, 2021) --Objectives and action plans regarding social responsibility for employees and relations with the local community --Safety and Health Report	Target level	
							There is evidence of environmental and social awareness and training, in production unit workers, sufficient for them to properly dispose of waste, and prevent and manage chemical and hydrocarbon spills, or to lodge a grievance.				
Principle 5: Community relations and interaction	5.1 Community impacts	a. Community impact	An assessment of the production unit community impact is conducted, and if determined necessary by the assessment, an independent p-SIA is conducted.	Y	Impact assessment on stakeholders of Yayama Shokusan Co., Ltd. has been developed. Stakeholders include employees, local community, related businesses, local organizations etc. It was assessed that there is no impact on stakeholders. As a result of the impact assessment review on July 8, 2021, there is no change in the assessment results. i. Local people can submit comments to Yayama Shokusan directly by phone call, fax, post and via website. The company is always welcome to receive comments. However, both the company and local community recognize that there is no impact caused by the company on local community. So there has been no comment from local community to the company so far. In order to proactively communicate with local community, the company contributes to the local community by participating in event, providing lectures at schools, sponsoring festivals and events and co-hosting marathon and triathlon events. After 2020, the event was cancelled due to the Corona disaster, and only donations were made to the local community. In order to survey the opinions of local residents, a questionnaire was sent to employees residing in the area. Interviews were also conducted by visiting elementary and junior high schools, social welfare facilities, and community centers in the district. ii. Interview confirmed that both the company and local community recognize that there is no impact caused by the company on local community. The company made declaration and agreements with Shiohara area not causing any pollution when establishing the facilities. The survey responses from employees were reported to the Executive Committee as part of the community's requests and complaints, and future actions were discussed. Results of the assessment are available upon request. iii. Local community can always freely submit comments to the company. Confirmed the results of the hearings in the areas that the company conducted this time. iv. There is no need for considering alternatives as there is no risk or actual impact identified. v. Research results or reports do not exist as no impact is identified. vi. The changes and their results are described in the context of the evaluation. vii. No issue need to be mitigated. viii. No negative impact. ix. The interviewees confirmed that both community representatives, neighborhood groups, and Yayama Shokusan do not believe that the algae farming facilities have any impact on the local community. The region is expected to cooperate and lead the way in terms of disaster prevention, and the UoA is expected to have a positive impact on the region in this regard. x. Impact assessment was conducted by employees and the president of the company. Results are available. xi. The exchange of data with the community is meaningful and may expand to community-wide activities, including community representatives, for cooperation on disaster reduction. Communication with local elementary and junior high schools, community center representatives, and managers of nearby social welfare facilities was confirmed. xii. As aforementioned, the company makes use of various opportunities and exchange options with local community at least twice a year. 1. Local community and stakeholders recognize that there is no impact caused by the company on local community. Stakeholder interviews confirmed that there were no negative effects. 2. Not applicable as there is no resource to restrict access. Confirmed that an assessment of the production unit community impact is conducted.	Recommendations of the production unit's community impact assessment are being implemented and the production unit is shown to have positive social benefits for the community.	Y	a. As a result of the impact assessment, it was concluded that the Company has no impact on the local community and there are no specific recommendations to be implemented against the impact. b. Although there is no perceived impact on the local community at this time, the results of the questionnaires from employees residing in the village were reported to the Executive Committee as an item of requests and complaints from the community, and future actions were discussed in order to maintain good relations with the community. The establishment of a cooperative system in the event of a disaster and cooperation in the education of local elementary and junior high schools are being considered. The company plans to continue to hold discussions with local stakeholders once a year, and will strive to communicate with the local community. The necessary precautions have been taken. c. More than 80% of employees are from Ishigaki Islands and 5 of them are from Shiohara area. The company greatly contribute to local job provider. There is no gender discrimination in employment practice. The company is greatly contributing to local economy by: -Gaining naming rights of a shopping mall in Ishigaki Islands and ship terminal; -Sponsoring local festivals and events. The company also provide lectures to local primary and secondary schools (conducted on November 6, 2021), and plan to continue to cooperate with the local community in disaster prevention and education, which is expected to have a positive social impact. d. There is no resource available to local community within the facilities of the company. Hence not applicable. The production unit is shown to have positive social benefits for the community. There is no recommendations of the production unit's community impact assessment.	--Stakeholder Impact Assessment for Yayama Shokusan Kaisha' (revised July 8, 2021) --List of employees (June 1, 2021) Results of questionnaire for employees living in Shiohara (March-April 2021) --Hearing at Shiohara elementary and junior high schools (June 17, 2021) --Hearing at social welfare facilities (June 18, 2021) --Excerpt from the minutes of the executive board meeting (May 11, 2021) --Interview with local residents (January 11, 2022) --13th training plan/implementation schedule (for 2021)	Target level	
	5.2 Conflict resolution	a. Resolution of disputes	The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system.	Y	a. No dispute regarding social issues has been received. The contents of the opinions interviewed from local elementary schools and welfare facilities were recorded. A questionnaire was also sent out to employees living in the village to indirectly confirm local opinions, and the results were reported to the executive committee for consideration for future management. b. Local people can submit comments to Yayama Shokusan directly by phone call, fax, post and via website. The company is always welcome to receive comments. The complaint desk is accessible. When a legal appeal is made, the mediation and litigation procedures are made at the court based on the laws such as the civil arbitration law and the civil procedure litigation law, and settlement will be attempted. The company is also within these legal frameworks. Therefore, the management system is subject by law to a mechanism for the resolution of legal disputes arising within the system.	The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes, which is considered to be effective in dealing with most issues and that is appropriate to the context of the UoA.	Y	"Dispute resolution procedure" of Eugenia group is in place. Depending on the nature of dispute, dispute resolution group is organized from a certain section or from several sections. In case if legal actions are required, the company is to follow the requirements of national laws. When a legal appeal is made, the mediation and litigation procedures are made at the court based on the laws such as the civil arbitration law and the civil procedure litigation law, and settlement will be attempted. The company is also within these legal frameworks. In Japan, the arbitration and litigation procedures are transparent, functioning effectively against most problems, and also appropriate to the context of the UoA. Therefore, the management system is subject by law to a transparent mechanism for the resolution of legal disputes, which is considered to be effective in dealing with most issues and that is appropriate to the context of the UoA.	--Grievance Procedure (May 31, 2021) --Interview with local residents (January 11, 2022)	Target level	

	b. Roles and responsibilities	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are generally understood.	Y	"Dispute resolution procedure" has been documented which specify contact details, responsible personnel, handling procedures. Understanding of the procedure among managers has been progressing. Therefore, organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are generally understood.	Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interactions.	Y	"Dispute resolution procedure" has been documented which specify contact details, responsible personnel, handling procedures. When a complaint is received, it is dealt with in accordance with the reporting flow in the crisis management regulations. At Yayama Shokusan, the procedure is to consult with the executive board, the board of directors, or the Euplena head office. At Euplena Head Office, the person in charge determines the flow of subsequent reports. The Audit Committee of Euplena Head Office (three external audit committee members, including a legal expert) audits whether or not the response to the complaint is appropriate. In-house training also includes how to respond to complaints when they arise. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interactions.	--Grievance Procedure (May 31, 2021) --Interview with local residents (January 11, 2022)	Target level	
	c. Consultation process	The company has a written "Dispute resolution procedure" which includes consultation processes that obtain relevant information from the main affected parties, including local communities and knowledge, to inform the management system.	Y	a. The company has a written "Dispute resolution procedure" to promptly determine and address complaints. The company clearly states that it accepts complaints from outsiders on its website and by phone. b. There was no local person who made any dispute to the company. Local people interviewed recognized that they can contact the company if needed. c. Since the company has never been asked about the dispute resolution procedure from local community, and there has been no issues for many years, the company has not provided the procedure. If provided, the records are to be kept. The management system includes consultation processes that obtain relevant information from the main affected parties, including local communities and knowledge, to inform the management system.	The management system includes consultation processes that regularly seek and accept relevant information, including local communities and knowledge. The management system demonstrates transparency and consideration of the information obtained.	Y	"Dispute resolution procedure" has been documented which include a policy on dispute resolution. The company makes use of various opportunities and exchange opinions with local community at least twice a year. So far no dispute has been raised. The management system includes consultation processes that regularly seek and accept relevant information, including local communities and knowledge. The management system demonstrates transparency and consideration of the information obtained.	--Grievance Procedure (May 31, 2021) --Interview with local residents (January 11, 2022)	Target level	
	d. Participation	The consultation process provides opportunity for all interested and affected parties to be involved.	Y	a. As mentioned in 5.2c) above, "Dispute resolution procedure" has been documented which specify that dispute from external individual / organization can be received via phone and website. Also it include a policy on dispute resolution. Therefore, the management system includes consultation process to provides opportunity for all affected stakeholders to be involved. Employees residing in the village were also interviewed for their local opinions, and the results were reported to the Executive Committee for consideration for future management. Hearings were also conducted from nearby elementary schools, community centers, and social welfare facilities. b. Communication with local community does not discriminate any particular person/groups. Local people interviewed recognized that they can contact the company if needed. The consultation process provides opportunity for all interested and affected parties to be involved.	No target specified for this PI. If minimum it not the target should be considered met.			--Grievance Procedure (May 31, 2021) --Interview with local residents (January 11, 2022) --Shiraho resident workers questionnaire results (March-April 2021) --Hearing at Shiraho Elementary School and Junior High School (June 17, 2021) --Hearing at social welfare facilities (June 18, 2021) --Excerpts from the minutes of the executive board meeting (May 11, 2021)	Met	
5.3 Rights of indigenous people	a. Rights of indigenous people	There is evidence that the rights of indigenous people are respected by the production unit (where applicable to growing area) and attempts are made to respect indigenous people.	Y	There are no indigenous people in the region.	No target specified for this PI. If minimum it not the target should be considered met.				Met	
5.4 Visibility, positioning and orientation of production units or water-based structures	a. Compliance with navigational rules and regulations.	Production units allow access for other resource users as prescribed by system or law.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.	No target specified for this PI. If minimum it not the target should be considered met.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.		N/A	
	b. Positioning of production unit sites	Visible structures of production units are arranged in an orientation and position as prescribed by system or law.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.	Visible structures of production units are arranged in a uniform orientation and position, except where specified by law.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.		N/A	
5.5 Identification and recovery of substantial gear	a. Identification of substantial gear	There is evidence that all substantial gear is identifiable to production unit.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.	No target specified for this PI. If minimum it not the target should be considered met.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.		N/A	
	b. Gear recovery	There is evidence that gear recovery is conducted by the production unit.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.	The production unit ensures that they maintain the proper equipment and for mechanisms for recovering gear.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.		N/A	
	c. Float use	Float use is recorded by the production unit. Floats are securely attached so that they do not become loose.	N/A	Not applicable as it is a land-based system (category C) and they do not use any substantial gear or structures in the wild aquatic environment.	No target specified for this PI. If minimum it not the target should be considered met.				N/A	
5.6 Noise, light and odour	a. Noise, light and odour	There are some measures that can help minimise operational noise, light and odour as appropriate to local custom.	Y	"Safe and healthy work specification" specifies operations that generate noise and clearly states measures. Noise is measured and monitored monthly at 17 fixed points in the Uda. The monitoring results are documented and stored as working environment measurement results. Interview to local community confirmed that there is no issue of noise or light. Noise is generated to some extent inside the facility around machines, but it was confirmed that noise did not reach to outside the facility. Depending on the weather and wind directions, they can detect some odor of the facility but the degree is not at the level of any concern. Because there is no operational noise, light or odour to community, measures that can help minimise them are not needed.	There is evidence that noise, light and odour originating from the production unit are minimised in areas where it may impact others or as prescribed by law.	Y	At night, the production is not in operation and the building is only lighted. A noise meter has been installed to measure monthly the noise at 17 points inside the site, and it has been confirmed that it is below 85 decibels and rarely exceeds the noise level inside the site. The measurement results are stored in a document as working environment measurement results. A foul odor was temporarily generated due to a culture failure a long time ago, but it has since improved and has not recurred. Interview to local community confirmed that there is no issue of noise or light. It was confirmed that noise did not reach to outside the facility. Depending on the weather and wind directions, they can detect some odor of the facility but the degree is not at the level of any concern. Therefore, there is evidence that noise, light and odour originating from the production unit are minimised in areas where it may impact others.	--Safety and health work standards (revised on July 1, 2021) --Interview with local residents --Working environment measurement results (December 1, 2021)	Target level	
5.7 Abandoned production units	a. Abandoned production units	There is a mechanism in place for cleaning up any unused production units.	Y	Yayama Shokusan has been operating for 40 years at this place, and it is unlikely to abandon the production unit, but in the event that they decide to abandon (sell) the land by any chance, based on an agreement with the buyer of the land, production units that are no longer used will be removed. This is a customary mechanism for general land transactions in Japan. Therefore, there is a mechanism in place for cleaning up any unused production units.	No target specified for this PI. If minimum it not the target should be considered met.				Met	

Summary of scoring table

Principle	Performance Indicator	Level	Number of Conditions	Pass
1	PI 1.1	Stock Status	N/A	Passed
	PI 1.2	Harvest strategy	N/A	
	PI 1.3	Genetic impact on wild stock	N/A	
2	PI 2.1	Habitat	Target level	Passed
	PI 2.2	Ecosystem structure and function	Target level	
	PI 2.3	ETP species	Target level	
	PI 2.4	Other species	Target level	
	PI 2.5	Waste management and pollution control	Target level	
	PI 2.6	Pest(s) and disease(s) and management	Target level	
	PI 2.7	Energy efficiency	Target level	
	PI 2.8	Translocations	N/A	
	PI 2.9	Introduction of alien species	N/A	
3	PI 3.1	Legal and/or customary framework	Target level	Passed
	PI 3.2	Decision-making processes	Target level	
	PI 3.3	Compliance and enforcement	Target level	
4	PI 4.1	Child labour	Target level	Passed
	PI 4.2	Forced, bonded or compulsory labour	Target level	
	PI 4.3	Discrimination	Target level	
	PI 4.4	Health, safety and insurance	Target level	
	PI 4.5	Fair and decent wages	Target level	
	PI 4.6	Freedom of association and collective bargaining	Target level	
	PI 4.7	Disciplinary practices	Target level	
	PI 4.8	Working hours	Target level	
	PI 4.9	Environmental and social training	Target level	
5	PI 5.1	Community impacts	Target level	Passed
	PI 5.2	Conflict resolution	Target level	
	PI 5.3	Rights of indigenous groups	Met	
	PI 5.4	Visibility, positioning and orientation of farms or water-based structures	N/A	
	PI 5.5	Identification and recovery of substantial gear	N/A	
	PI 5.6	Noise, light and odour	Target level	
	PI 5.7	Decommissioning of abandoned farms or water-based structures	Met	

Table 4. Maximum number of conditions allowed for a certified UoA

Principle	Production system category (as in Table 2)				
	A	Bi	Bii	Ci	Cii
P1	1	1	0	1	0
P2	2	2	2	2	2
P3	1	1	1	1	1
P4	2	2	2	2	2
P5	2	2	2	1	1
Total	8	8	7	7	6

Summary of conditions

The team shall create a schedule of conditions stating the specific requirements that are to be met within a specified timeframe, using the Summary of Conditions section of the ASCMSC Seaweed Audit Reporting Template [CAR, 17.12.4]

Note: If no conditions are raised, this tab should not be completed.

Condition number	Condition	Timeframe	Performance Indicator	Scoring issue	Related to previously raised condition? (only for re-assessment or surveillance)	Action Plan (provided by the client in the review of the Client Draft Report)	Status of condition	Rationale for closing conditions (to be updated during surveillance)
	none							

[Create new rows as required]

Table 4. Maximum number of conditions allowed for a certified UoA

Production system category (as in Table 2)					
Principle	A	Bi	Bii	Cl	Cii
P1	1	1	0	1	0
P2	2	2	2	2	2
P3	1	1	1	1	1
P4	2	2	2	2	2
P5	2	2	2	1	1
Total	8	8	7	7	6

[Summary of critical conditions]

Note: If no critical conditions are raised, this tab should not be completed

Condition number	Condition	Timeframe	Performance Indicator	Scoring issue	Related to previously raised condition? (only for re-assessment or surveillance)	Client response	Rationale for closing conditions
1	None		Select PI				
2			Select PI				
3			Select PI				

[Create new rows as required]

Traceability section (CAR 17.14)

1. Review and document:	Description			
1a. The flow of certified product from harvest to sale within the UoA	Euglena and Chlorella cultivated in tanks/pools are transported to centrifuge separator through pipes together with the culture medium. The algae are separated from the culture medium and concentrated to 15-20%. They are then transported to spray dryer to be dried powder form. Powdered euglena and chlorella are then put in bags and packed in cardboard boxes. These processes are continuous and so the production process starting from cultivation pools to boxing are managed by batch.			
1b. The associated traceability system which allows product to be traced from first point of sale back to the harvesting/culturing facilities in the UoA	<p>As aforementioned, harvesting is conducted in a batch. So packaged products are clearly identifiable to which cultivation pools they originated. Different colour of tapes are used to seal the cardboard boxes to clarify which tanks/pools the batch originated.</p> <p>As long as there is no outbreak of bacteria or cessation of production, the strains cultured in the sterilization tanks (Chlorella 5t, Euglena 25t) are supplied to the culture tanks and pools as needed. When the sterilization tank becomes empty, the succession culture strains from the seedling culture room are added to the sterilization tank.</p> <p>Because the production line is switched for each batch of culture tanks, there is no mixing of Chlorella and Euglena in the separator and spray dryer. It is possible to track the culture batches from the point of sale. All production uses the same passive culture strain.</p>			
1c. The traceability documentation at each stage of handling certified product and how product can be linked from each document (e.g. through batch codes, lot codes, etc.	The results of the traceability test confirmed that the tracing documents (shipping records, packing records, harvest records, daily work reports, culture records, etc.) for each handling stage were checked and linked with the following information: planting information of the successor culture strain, culture pool or tank number/planting date/stock lot information, harvested pool or tank number, and lot number to be assigned after harvest.			
1d. A detailed description of the systems used to segregate and identify certified product at each stage of handling	All euglena and chlorella produced in Yaeyama Shokusan's facilities (UoA) are included in the scope of certification. No non-certified portion exist.			
2. Identify if the following risks are currently or potentially applicable	Currently applicable risk (Y/N)	Potentially applicable risk (Y/N)	If answer to current or potential risk is yes clearly document the risk	Describe any traceability, segregation, or other systems in place to manage and minimise the risk.
2a. The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, produced within the same UoA	No	No	-	All euglena and chlorella produced in Yaeyama Shokusan's facilities (UoA) and shipped from there are included in the scope of certification. Since the production line is switched for each batch of culture tanks, there is no mixing of chlorella and euglena.
2b. The possibility of mixing or substitution of certified and non-certified product, type of production/harvest, including product of the same or similar appearance or species, present during production, harvest, transport, storage, or processing activities	No	No	-	All euglena and chlorella produced in Yaeyama Shokusan's facilities (UoA) are included in the scope of certification. Since the production line is switched for each batch of culture tanks, there is no mixing of chlorella and euglena.
2c. The possibility of subcontractors being used to handle, transport, store, or process certified products	No	No	-	UoA does not include subcontractors handling certified products.
2d. Any other opportunities where certified product could potentially be mixed, substituted, or mislabelled with non-certified product before the point where product enters the Chain of Custody	No	No	-	All certified products are shipped in sealed cardboard boxes. Therefore there is no possibility of non-certified product entering the certified product before the product enters subsequent Chain of Custody.
3. Determination	Yes/No	Justification		
3a. Are traceability and segregations systems in place are sufficient to address the risks and to ensure all products identified and sold as certified originate from the UoA?	Yes	All euglena and chlorella produced in Yaeyama Shokusan's facilities (UoA) and shipped from there are included in the scope of certification.		
3b. Is a separate chain of custody certification required for the UoA before products can be sold as certified?	No	Since all products are to be certified products and there is no risk of mixing of non-certified products, a separate CoC certification is not needed for the UoA.		
3c. Confirm whether products are eligible to enter further chains of custody	Yes	All euglena and chlorella produced in Yaeyama Shokusan's facilities (UoA) and shipped from there are included in the scope of certification. Therefore, the products are eligible to enter further CoC.		
3d. If a separate chain of custody certification is not required, document the intended point of first sale	Yes	Point of first sale is where the boxed euglena and chlorella are shipped from Yaeyama Shokusan Co., Ltd.		
3e. If a separate chain of custody certification is not required, document the point from which chain of custody is required to begin	Yes	The point from which chain of custody is required to begin is where the boxed euglena and chlorella which left the facilities of Yaeyama Shokusan Co., Ltd arrives at processing facilities further down the supply chain (From reception at first point of sale or handling).		

Determination

Draft determination	<i>euglena Co., Ltd. will be recommended for certification based on the ASC-MSC Seaweed (Algae) Standard Version 1.01</i>
Final determination	<i>No change to the determination have been made after PCDR. euglena Co.,Ltd. is granted for the ASC-MSC Seaweed (Algae) certification for Euglena gracilis and Chlorella sorokiniana.</i>
Entities allowed to use certificate	<i>euglena Co., Ltd. and its subsidiary company Yaeyama Shokusan Co., Ltd.</i>
The point from which CoC is required to begin	<i>The point from which chain of custody is required to begin is where the boxed euglena and chlorella which left the facilities of Yaeyama Shokusan Co., Ltd arrives at processing facilities further down the supply chain (From reception at first point of sale or handling).</i>
Eligibility date	<i>23rd January 2022</i>

Additional resources

Table 3. Applicability of PIs depending on the characteristics of the UoA production system.

Table 3: Applicability of PIs depending on the characteristics of the UoA production unit

Performance Indicators	Criteria	Yes/ No	Action
PI 1.1 Stock Status PI 1.2 Harvest strategy	1. Does the activity depend on wild stocks of seaweed or on seed supplied from them (categories A, Bi or Ci)?	Yes	Score these PIs
		No	Do not score these PIs
PI 1.3 Genetic impact on wild stock	1. Is translocation occurring or the activity requires stages cultivated in hatcheries?	Yes	See next criteria
		No	Do not score this PI
	2. Is it a land-based system (category C)?	Yes	See next criteria
		No	Score this PI
	3. Is there contact with, extraction from, or impact on the marine environment which cannot be considered negligible?	Yes	Score this PI
		No	Do not score this PI
PI 2.1 Habitat	1. Is it a land-based system (category C)?	Yes	See next criteria
		No	Score these PIs
PI 2.2 Ecosystem structure and function	2. Is there contact with, extraction from, or impact on the marine environment which cannot be considered negligible?	Yes	Score these PIs
		No	Do not score these PIs
PI 2.7 Energy efficiency	1. Is it a micro family business?	Yes	Do not score this PI
		No	Score this PI
PI 2.8 Translocations	1. Is translocation occurring?	Yes	See next criteria
		No	Do not score this PI
	2. Is it a land-based system (category C)?	Yes	See next criteria
		No	Score this PI
	3. Is there contact with, extraction from, or impact on the marine environment which cannot be considered negligible?	Yes	Score this PI
		No	Do not score this PI
PI 2.9 Introduction of alien species	1. Is the UoA targeting an alien species?	Yes	Score this PI
		No	Do not score this PI
PI 3.1 Legal and/or customary framework	1. Is the production of such low intensity, scale, and level of development as to be considered to not yet need a national legal framework?	Yes	Do not score this PI
		No	Score this PI
PI 5.4 Visibility, positioning and orientation of farms or water-based structures	1. Is it a land-based system (category C)?	Yes	See next criteria
		No	Score these PIs
PI 5.5 Identification and recovery of substantial gear	2. Does the activity require the use of substantial gear or structures in the wild aquatic environment?	Yes	Score these PIs
		No	Do not score these PIs

