

Approved by:
the Management Board
of JSC NMC Tau-Ken Samruk of
December 26, 2022
No. 55-22

**Standard for
Behavioral Security Audit
at the Production Facilities of JSC NMC Tau-Ken Samruk and
Subsidiaries**

Astana 2022

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 1
-----------	---	---------------

Content:

1. Document Purpose 4

2. Scope of Regulation4

3. Terms, Definitions and Abbreviations

3.1 Terms and Definitions4

3.2 Accepted Abbreviations5

4. Regulatory Legal References 5

5. Activity Description 5

6. Categories of observation.....7

7. Procedure for conducting a conversation with an employee10

8. Execution of audit results12

9. Data processing and analysis of audit results12

10. Corrective measures16

11. Registration, accounting and record storage16

12. Responsibility.....16

13. Final provisions17

Annex 1. Form of the Schedule for Behavioral Security Audit.....18

Annex 2. Form of the report on the results of a behavioral security audit19

Annex 3. Example of calculating the change of N_o risk indicator.....21

Annex 4. Block diagram of the BSA procedure.....22

**Information
about the Standard for Behavioral Security Audit**

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 2
-----------	---	---------------

at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries

Functional scope of the document	Documentation support
Document Purpose	Prevention of occupational injuries, accidents, fires and occupational diseases, increasing the information content of staff and the level of occupational safety culture of employees of JSC NMC Tau-Ken Samruk and its subsidiaries, employees of contractors
Developer	Project Office
It is introduced instead of	-
Effective date	From the date of taking by the Management Board of JSC NMC Tau-Ken Samruk the decision on approval of the document
Validity	Before taking by the Management Board of JSC NMC Tau-Ken Samruk of the decision on termination
Location of the original	It is the Annex to the meeting Minutes of the Management Board of JSC NMC Tau-Ken Samruk, scanned version in the electronic database of the IRDs of the electronic document management system

1. Document Purpose

The main purpose of the Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and its Subsidiaries (hereinafter - the Standard) is to determine the procedure for behavioral security audit aimed at identifying, monitoring and preventing dangerous actions and dangerous

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 3
-----------	---	---------------

conditions, strengthening motivation and increasing commitment of senior management and managers of all levels, as well as employees' safety issues by clarifying the consequences of behavior in the audit process, or dangerous actions and being in dangerous conditions of an employee.

2. Scope of Regulation

1. Scope of regulation – the requirements of this Standard apply to all works/services of an industrial nature, intended for employees of the Company and Subsidiaries, as well as employees of contractors performing work /rendering services at the production facilities of the Company and Subsidiaries.

3. Terms, Definitions and Abbreviations

3.1. Terms and Definitions

This Standard makes use of the following terms and their corresponding definitions:

Company - Joint Stock Company “National Mining Company “Tau-Ken Samruk”;

Subsidiary – legal entities, 50% or more of voting shares (interests) of which is owned by the Company by right of property or trust management;

Safe Action - an employee’s action that allows, without risk to life and health, or the occurrence of another incident, to carry out work in accordance with the requirements imposed on them;

Safe Condition - a workplace factor that meets the requirements of current regulatory legal acts and internal regulatory documents that ensure safe work;

Observation Categories - a set of audit criteria combined on a common basis.

Occupational Safety Culture - the qualification and psychological preparedness of all employees of the Company and Subsidiaries at which ensuring occupational safety is a priority goal and an internal need, leading to awareness of personal responsibility and self-control in performing work affecting occupational safety;

Dangerous Action - an action or inaction of an employee that violates the requirements of the current regulatory legal acts of the Republic of Kazakhstan, as a result of which the risk of damage to the health of an employee and others increases, or the occurrence of another incident;

Dangerous Condition - a workplace factor that is not directly related to the action or inaction of one or more employees, which can result in an accident or injury, if it is not eliminated;

Behavioral Security Audit - a type of audit based on observing the actions of a particular employee/group of employees during the performance of a production assignment, evaluating the conditions for completing a production assignment, as well as a subsequent conversation between the employee and the auditor;

Employee - an individual who is in an employment relationship with an employer and directly performs work under an employment contract;

Works and/or Services of an Industrial Nature - performing individual operations during the performance of works and/or rendering services, monitoring compliance with established technological processes, carrying out repairs and maintenance of fixed assets, technical support of information systems and other similar works/services; works and services for the design and capital construction of industrial facilities; rent of real estate for industrial purposes and means of production (tools, equipment, etc.); transportation services for the transportation of goods and delivery of finished products and other similar works and services that directly support the production process;

High-risk work - work in which an employee or technical devices of hazardous production facilities may be affected by dangerous and (or) harmful production factors, including those unrelated to the nature of the work performed, for which appropriate safety measures must be taken;

Incident - failure or damage of technical devices used at a hazardous production facility, deviation from the technological process mode;

Stop Point - a violation that has entailed serious consequences (industrial accident, accident, catastrophe), or may knowingly pose a real threat of such consequences;

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 4
----	---	--------

Work Site - a territory / part of the territory or premises of the Company or Subsidiary transferred to the Contractor under the certificate and on which the Contractor performs work / renders services of a production nature.

3.2. Abbreviations

IRDs	Internal regulatory documents
Subsidiary	Subsidiary
OSMS	Occupational Safety Management System
BSA	Behavioral safety audit
OHS	Occupational health and safety
CEO-1	<u>Senior executive who reports to the CEO (Chief Executive Officer of the Company or General Director of the Subsidiary)</u>
PPE	Personal protective equipment
RoK	Republic of Kazakhstan

4. Regulatory Legal References

This Standard makes use of references to the following regulatory legal documents:

- 4.1. The Code of the Republic of Kazakhstan “On Health of the People and the Healthcare System”;
- 4.2. The Labor Code of the Republic of Kazakhstan;
- 4.3. GOST 12.0.230.1-2015 System of occupational safety standards. Occupational safety and health management systems. Guidelines for the use of GOST 12.0.230-2007”;
- 4.4. CH PK 1.03-05-2011 “Occupational Health and Safety in Construction”.
- 4.5. **CT PK 12.0.002-2016 “Occupational safety standards system. Occupational health and safety management system in organizations”**

5. Activity Description

5.1. The BSA objectives include:

- Prevention of occupational injuries, accidents, incidents, fires and occupational diseases;
- Formation of real information about the state of facilities in the field of occupational safety;
- Increasing the information content of personnel in the field of occupational safety;
- Improving the level of occupational safety culture.

The BSA tasks include:

- Identification of the direction of OSMS improving;
- Employee motivation for safe work and compliance with occupational safety requirements.

5.2. The BSA is held in **Subsidiaries**, including contractors. It is allowed to conduct BSA in conjunction with internal audits and inspections of various levels of administrative and industrial control.

5.2.1. The heads of structural subdivisions of the Subsidiaries compile and approve lists of persons from among the employees of their structural subdivisions who carry out BSA activities, and appoint secretaries responsible for compiling monthly BSA schedules in their structural subdivisions, monitoring compliance with BSA schedules, collecting, analyzing reports on BSA activities, as well as transmitting the BSA results to the Subsidiary’s OHS Service.

5.2.2. The list of responsible employees who carry out the BSA is adjusted when the composition of the persons of structural subdivisions is changed.

5.2.3. For each BSA, a report is prepared in accordance with **Annex 2** to this Standard. The report is compiled by the auditor in 1 copy, the original of which is handed over to the OHS Service to monitor the completion and implementation of corrective measures in the structural subdivision, a copy of the report is

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 5
-----------	---	---------------

transmitted to the head of the structural subdivision for the purpose of operational implementation of corrective actions and analysis of the BSA in the structural subdivision where the BSA was held.

5.2.4. The head of the structural subdivision of the Subsidiary, following the BSA, analyzes the results of the BSA on a monthly basis and performs corrective actions and provides the OHS Service with a follow-up report at a meeting on OHS issues with the participation of the first head of the Subsidiary or his/her deputy.

5.3. BSA frequency **at the initial (implemented) stage:**

- 1) for the top management of the Company (CEO-1) – once a quarter;
- 2) responsible person for the Company’s OHS - at least once every 2 months;
- 3) for senior management of the Subsidiary - at least once every 2 months;
- 4) heads of structural subdivisions of the Subsidiary (head of the site, workshop, etc.)

- at least once a month;

5) line managers (foreman, mechanic, etc.) at least 4 times a month.

5.3.1. For Subsidiaries with stationary equipment placement, it is allowed to reduce the time of BSA by line managers to 1 time per month.

5.3.2. The duration of one BSA should be no more than 15-20 minutes and depends on the nature and specifics of the production, the number of employees and the nature of work performed.

5.4. The BSA schedule is developed and approved by the head of the structural subdivision of the Subsidiary, and a copy is sent to the OHS Service of the Subsidiary.

5.5. The BSA is held in the following order:

a. plan the time of the BSA in accordance with the approved schedule according to the form provided for in **Annex 1**;

b. visit the BSA location and make observations over employee using the observation categories under **Section 6**.

b. if the workers perform work safe:

- 1) make a comment on the safe behavior of the employee, note the efforts made on their part for the safe performance of work;
- 2) discuss other safety issues, discuss potential hazards and ways to identify, prevent and avoid them;
- 3) listen to the suggestions of employees on the safe performance of work;
- 4) thank employees for their time.

d. if the workers perform work unsafe:

- 1) if the conditions/actions pose a threat to the life and health of employees at the current time, then stop the work process;
- 2) make a comment on the safe behavior of the employees, note the efforts made on their part for the safe performance of work;
- 3) discuss the dangerous action of workers, pay attention to the consequences that it can lead to, ask how you can do the work safely;
- 4) obtain the consent of employees to do their work safely in the future;
- 5) discuss other safety issues, discuss potential hazards and ways to identify, prevent and avoid them.

Clarify the employee’s suggestions for the safe performance of work;

6) thank the employee for his/her time;

7) if there are long-term corrective actions to eliminate the comments, it is recommended to discuss them with the immediate supervisor of the site or employees.

5.6. The BSA flowchart is provided for in **Annex 4**.

5.7. When conducting the BSA, it is necessary to use the methodology for conducting a conversation with an employee, provided for in **Section 7**.

5.8. A report on the BSA results is compiled for each BSA in accordance with **Section 8**. If the BSA was conducted by a group of auditors, one report is compiled on the BSA results. The report on the BSA results indicates all identified dangerous conditions/actions.

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 6
-----------	---	---------------

5.9. The report on the BSA results does not specify the full name of the employees in respect of whom the audit was conducted, except in cases when the conditions/actions of the employee require an immediate stop to the work execution process and subsequent corrective actions.

5.10. Punishment of the employee is **not allowed** based on the BSA results.

5.11. To carry out the BSA, employees of the Subsidiary must undergo appropriate instruction and training held by the OHS Services of the Subsidiaries.

5.12. For the dissemination and use by contractors of the provisions of this Standard, the Subsidiary to include the clause “Obligations of contractors in the field of occupational health and safety and environmental management” in service/work procurement contracts. Obligations should include requirements for compliance with internal documents of the Company and Subsidiaries in the field of occupational health and safety and environmental management, including the requirements of this Standard.

5.13. Submit a copy of this Standard to the contractor within 3 working days after the conclusion of a service/work rendering/performing contract for review. If necessary, arrange a meeting with the responsible persons and the head of the contractor. Clarify, explain the provisions of this Standard and inform about the results and consequences of the contractor’s activities in case of non-compliance with the requirements of this Standard.

6. Categories of observation

6.1. In order to assess the actions of employees and the conditions at their workplaces, identify dangerous conditions/actions, the following categories of observations are defined, as well as criteria for their assessment:

- Employee reaction;
- Employee actions;
- Workwear and PPE;
- Tools and equipment;
- Instructions and rules;
- Workplace;
- Transport;

6.2. Observation categories and criteria for their assessment (*see Table 1*).

Table 1. Description of the observation categories

Observation category	Evaluation criteria
Employee reaction	<ol style="list-style-type: none"> 1. Readjust the work. 2. Changes the position. 3. Puts the PPE in order. 4. Bends down, hides, leaves. 5. Changes or hides the tool. 6. Installs protective devices. 7. Stops working.

Employee actions	<ol style="list-style-type: none"> 1. Gets distracted while doing work. 2. When walking, he/she does not look at his/her feet. 3. He/she doesn't hold on to the handrail on stairs. 4. Haste during the execution of work. 5. He/she endangers other employees. 6. Works in an uncomfortable/unsafe position. 7. Does not protect himself from danger: <ul style="list-style-type: none"> - moving objects/vehicles; - hot/cold surfaces; - dangerous substances; - height and falling objects; - electric current; - lack/insufficient lighting.
Workwear and PPE	<ol style="list-style-type: none"> 1. Workwear and PPE do not correspond to the nature of work performed. 2. All necessary PPE is not available. 3. Faulty (damaged) PPE. 4. The employee does not use the issued PPE correctly. 5. Collective protection means are not used, PPE is not used.
Tool equipment	<p>and</p> <ol style="list-style-type: none"> 1. The tool and equipment do not correspond to the nature of the work performed. 2. There are artisanal tools and equipment. 3. They are used in violation of security requirements. 4. Tools and equipment are defective, have visible damage, the necessary protective equipment (casings, screens, etc.) are missing/removed.
Instructions and rules	<ol style="list-style-type: none"> 1. Unavailable and/or missing. 2. Incomprehensible to the staff. 3. The requirements of relevant instructions and rules are not followed.
Workplace	<ol style="list-style-type: none"> 1. Blocking, littering and foreign objects and debris. 2. Slippery floor. 3. Tools, equipment and materials are placed unsafely.
Transport	<ol style="list-style-type: none"> 1. Seat belts are missing, defective, or not in use. 2. The driver's condition does not meet the requirements. 3. Dangerous driving style (sudden acceleration/braking, dangerous maneuvering, creating an emergency situation). 4. Using a mobile means of communication while driving (no headset). 5. Non-compliance with traffic rules (Speed limit, non-compliance with signs and road markings). 6. The condition of the vehicle does not meet the safety requirements.

6.3. The procedure for evaluating the actions of personnel by observation categories

6.3.1. When conducting an observation in the **Employee Reaction** category, the first reaction of the observed employee should be recorded within 10-30 seconds from the moment the auditor appears.

During the observation, actions of the employee should be noted. If employees put on and correct PPE when the auditor appears, change their position or rearrange their work, perhaps this means that employees know the methods of work, but purposefully do not comply with them.

6.3.2. When monitoring the **Employee Actions** category, it is necessary to assess the actions and physical situation of the employee, which may expose him/her to the risk of injury. Attention should be paid to whether the employee protects himself/herself from hazards (for example, exposure to moving objects, dangerous substances, electric current, etc.).

6.3.3. When carrying out surveillance in the **Workwear and PPE category, the method of “head-to-toe inspection”** should be applied using the following criteria:

- availability and application of the necessary PPE that correspond to the nature of the work;
- proper use (for example, the use of PPE only for the purposes for which it is intended);
- use and maintenance of PPE and collective protection equipment in proper working order.

6.3.4. When carrying out observations in the **Tools and Equipment”** category, the following should be carried out:

- use tools, equipment, and devices appropriate to the nature of the work performed;
- use tools, equipment, and accessories in accordance with the requirements of the safe operation instructions;
- make sure that the tools, equipment, and fixtures are in good working order and safe to work with, as well as there are no artisanal tools and equipment.

6.3.5. When monitoring the **“Instructions and Rules”** category, it is recommended to be in close proximity to the employee so that it can be determined whether the tools correspond to the work being performed and in what condition they are. It is recommended to have a conversation with the employee and establish how he/she uses the tool and equipment: is it safe or not.

6.3.6. When carrying out monitoring under the **Instructions and Rules** category, attention should be paid to the fact that the instructions and rules:

- available at the workplace;
- understandable to the employee;
- whether employees follow the rules when doing work.

The compliance of the instructions and rules with these requirements ensures the effectiveness of their use.

6.3.7. When monitoring the **Workplace** category, attention should be paid to the state of factors of the production environment, record the facts of clutter, contamination of the workplace, the presence of foreign objects, slippery floors in the work area and moving areas, assess the rationality and safety of the location of tools and equipment.

6.3.8. When monitoring the **Transport** category, the safety of workers when traveling by vehicles should be assessed. Analyze conditions such as the availability, serviceability and use of seat belts, compliance with the requirements of the vehicle condition, employee actions (driver’s condition, driving style, compliance with traffic rules and use of mobile communications).

6.4. If the observed conditions/actions of the employee pose a threat to the life and health of the employee and his/her colleagues at the current time, the process should be stopped and the employee’s senior management should be notified in order to prevent a dangerous event.

6.5. If a dangerous condition/action is found that is not described in the report on the BSA results, then it is indicated in the “Other” section.

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 9
----	---	--------

7. Procedure for conducting a conversation with an employee

7.1. Conducting a conversation with an employee is a mandatory BSA component and consists of several stages:

- preparation;
- observation;
- dialogue.

7.1.1. When preparing for the BSA, it is necessary to:

- a) analyze recent incidents at the facility, at similar facilities to identify and select tasks and measures taken to protect against risks in the implementation of which the BSA may have the greatest impact;
- b) get acquainted with the current production processes in order to study in detail the peculiarities of the technological process, the place and role of man in it;
- c) analyze the relevant procedures, systems, standards, and competencies, necessary for safe operation.

7.1.2. The observation is carried out as follows:

- a) it is recommended to approach the place and greet those with whom you are going to communicate (establish psychological contact – eye contact, start a conversation);
- b) it is recommended to explain to the employee that supervision and communication with employees is intended only to increase the level of his/her personal safety and the Subsidiary;
- c) it is recommended to conduct an observation analyzing the following issues:
 - 1) What are the risks associated with the job and the situation?
 - 2) What sources of risk are present? How can this risk be realized?
 - 3) What are people doing that can increase the risk of a dangerous event or the risk of injury?
 - 4) What can motivate people to do or not to do it?
 - 5) What prevents an employee from complying with safety requirements?
- d) duration of the observation is determined depending on the situation.

7.1.3. The dialogue should be conducted given the following provisions:

- a) in order to start a conversation, it is necessary to prepare an open question;
- b) it is recommended to start a conversation when it is safe;
- c) it is necessary to receive confirmation from the employee that now is a convenient time for stopping the technological process and subsequent conversation;
- d) when talking, use eye contact, introduce yourself and ask the employee to introduce himself/herself;
- e) during the conversation, address the employee by name;
- f) speak in a respectful and friendly tone, using open body language (do not cross your arms, direct your face to the other person and keep an acceptable and comfortable distance when communicating);
- g) mark at least one safe condition or safe action of each employee under observation;
- h) ask open-ended questions (starting with the words “How, what, in what way..”), which relate to elements of the risk assessment model;
- i) ask only those questions to which you know the answer, do not ask rhetorical questions or questions to which the answer is obvious;
- l) listen, pause after each question to allow the employee to answer;
- m) it is necessary to watch the employee, how he/she speaks, what he/she says, and confirm that you understand the answer, confirming it with words;
- h) ask interrelated questions that logically follow from the answers of the employee, continuing to ask questions until the answer to the main question is revealed; n) it is necessary to avoid:
 - 1) supervisory and derogative tone, accusations;

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 10
-----------	---	----------------

- 2) disregard to an employee;
- 3) monitoring only the equipment and the working environment.

7.2. If the employee is working safely, the safe methods used by the employee should be recognized and noted:

- describe what was observed;
- say how it reduces the risk of injury;
- make a personal statement about the assessment;
- thank the employee.

7.3. If an employee commits a dangerous action, it is necessary to:

- comment on safe conditions/actions, note the efforts that the employee has made in accordance with the safety requirements;
- describe what dangerous things were observed;
- pay attention to the consequences of a dangerous action, not the action itself;
- avoid the word “violation”;
- ask how this increases the likely risk of injury, and give the employee the opportunity to express their opinion on this situation;
- indicate mutual agreement on the need for risk reduction actions;
- describe alternative safe work practices, discuss correction and corrective actions;
- personal safety: ask the employee to commit to using safe work practices in the future, take into account corrective actions;
- agree on how correction or corrective actions will be taken.

7.4. Commitment to security issues should be supported by concrete actions.

7.5. After the BSA, the auditor should analyze his/her actions:

- whether the conversation have any impact on the employee;
- whether the conversation was a really honest;
- whether the employee assessed the degree of risk to which he/she is exposed;

Whether a clear agreement been reached between the employee and the auditor;

- whether the auditor took action and provided high-quality feedback;
- What went well, what was done;
- what can be done better next time and how to do it.

7.6. If necessary, feedback from the employee’s head should be provided:

- note the safe methods of performing the task of the observed employee to his/her management;
- advise the head on the safe practice agreed with the employee of changing conditions / actions in a similar situation in the future.

8. Execution of audit results

8.1. The BSA results report should contain the following information:

- date, time of the audit, full name and position of the auditor/s who conducted the BSA, subdivision/site where the audit was conducted;
- nature of the work performed;
- observation categories;
- brief comments of the auditor on the observed conditions/actions;
- measures taken to correct deficiencies;
- other.

8.2. The BSA results report is compiled in accordance with *Annex 2*.

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 11
-----------	---	----------------

8.3. The description of conditions/actions of the employee in the observed categories should be evaluated in terms of compliance with one of two indicators:

- “dangerous” - in the case when the observed criterion (condition/action) corresponds to the statement in the BSA results report, that is, it poses a danger, creates the prerequisites for a dangerous event;
- “not applicable” - in the case when the criterion (condition/action) is not observed / absent.

8.4. In the “Other” section, during the observation process, the necessary comments are recorded at the discretion of the auditor, taking into account *sub-item 6.5*.

8.5. In the “Measures Taken to Correct Deficiencies” section, the main conclusions of the BSA are recorded in the form of planned actions to prevent an accident or encourage safe performance of work, indicating responsible persons and deadlines. If it is necessary to take long-term corrective actions to eliminate the comments, they should be discussed with the employee’s immediate head.

8.6. The shelf life of the BSA schedule and the BSA results report is 1 year.

9. Data processing and analysis of audit results

9.1. The BSA introduction involves the mandatory analysis of dangerous actions and dangerous conditions in order to assess safety indicators, the course of their changes and the effectiveness of corrective measures.

9.2. The senior management and heads of the structural subdivisions of the Subdivision on a monthly basis, as part of the weekly OHS meetings, discuss the results of the analysis and decide what changes should be made to the OHS management process.

9.3. The OHS Service of the Subsidiary generates a monthly summary presentation on the BSA results based on the BSA reports.

9.4. The analysis of the BSA results is carried out according to the following parameters:

- 1) Compliance with the approved BSA schedule – the number of BSAs held compared to the number of planned BSAs;
- 2) identification of the most problematic areas by observation categories;
- 3) implementation of corrective measures;
- 4) presence of recurring inconsistencies;
- 5) indicators of potentially dangerous situations.

9.5. The analysis of the BSA results is carried out monthly according to the main safety indicators specified in Annex No. 2 to this Standard.

9.6. The example of the BSA results analysis is presented in Annex No. 3 to this Standard.

9.7. The data obtained from the BSA results are analyzed at least once a quarter by the structural subdivision of the Company authorized in the field of occupational safety, as well as at least once a quarter by the OHS structural subdivisions of the Subsidiary to determine the following indicators:

- execution of the audit schedule (I);
- number of heads who do not participate in the BSA or do not follow the schedule of planned BSAs ($N_{n,p}$);
- risk indicator (NI) of one conducted audit.

9.8. Implementation of the audit schedule is calculated using the formula

$$I = \frac{An}{A3} \cdot 100\%$$

where

An – the number of audits conducted;

$A3$ – the number of scheduled audits.

Growth of the indicator confirms an increase in the BSA importance in the Company or the Subsidiary, and a decrease indicates the need for corrective actions to improve the participation of responsible persons and heads of the Subsidiary heads in the BSA process.

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 12
-----------	---	----------------

9.9. Number of heads who do not participate in the BSA or do not follow the schedule of planned BSAs is calculation according to the formula N_n

$$N_{n.p.} = \frac{N_n}{N_y} \cdot 100\%,$$

where

N_n - number of heads who did not complete the audit plan;

N_y - total number of heads.

It is advisable for heads to take the necessary corrective actions to eliminate the reasons for heads' non-participation in the BSA process.

9.10. risk indicator (NI) of one conducted audit.

The indicator is calculated according to 40 criteria of the observed categories:

- employee/employees reaction – seven criteria;

- workwear and PPE - five criteria;

- tools and equipment – four criteria;

- instructions and rules – three criteria; - workplace – three criteria; - transport – six criteria. The indicator is calculated using the formula

$$NI = \frac{K0}{40 - K_H} \cdot 100 \%,$$

where

$K0$ – number of identified criteria with the “dangerous” indicator;

K_H - number of identified criteria with the “not applicable” indicator.

9.11. The risk indicator (N_0) of all conducted audits for the selected (i -th) time period is calculated using the formula

$$N_0 = \frac{\sum N_i}{A_i}$$

where NI - the risk indicator based on results of one audit conducted;

A - total number of audits conducted over the selected (i -th) period of time.

9.12. Based on results obtained, a graph should be created reflecting the change in N_0 during the reporting period.

9.13. The example of calculating the change in the N_0 risk indicator for a selected period of time (one quarter) is given in **Annex 3**.

9.14. For an analytical assessment of changes in the values of N_0 indicator, it is recommended to build a petal diagram reflecting the values of N_0 indicator for each of the observed categories.

For the creating, $N i_{on}$ should be calculated for each of the observed categories using the formula

$$N i_{on} = \frac{K i_{on}}{\% n - K i_{un}} \cdot 100$$

where $N i_{on}$ - indicator of the risk of the observed category based on results of one conducted audit; i – the serial number of the

category; n – the number of criteria of the category;

$K i_{on}$ - number of identified category criteria with the “danger” indicators;

$K i_{un}$ - number of identified category criteria with the “not applicable” indicator.

The n values are different for each category:

- employee/employees reaction – seven;

- employee/employees actions – twelve;

- workwear and PPE - five;

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 13
----	---	---------

- tools and equipment – four;
- instructions and rules - three;
- workplace – three;
- transport – six.

9.15. To assess the change in the values of N_{θ} indicator in the subdivision for each category of observation for any necessary period, it is necessary to find its average value for all the checked employees of the subdivision for each category according to the formula

$$N_{i_{ont}} = \frac{\sum_{i=1}^l N_{i_{on}}}{l},$$

where

$N_{i_{ont}}$ - risk indicator of the observed category based on results of all audits conducted with employees of the subdivision;

$N_{i_{on}}$ - indicator of the risk of the observed category based on results of one conducted audit;

i - the serial number of the category;

l - number of audits conducted with employees of the subdivision during the reporting period.

According to the data obtained (*for example, see Table 2*), a petal diagram of the change in $N_{i_{ont}}$ at the subdivision level for the reporting period should be created (example of calculating and creating, *see Figure 2*).

Table 2. Results of the indicators for the chart creating

Period	Employee actions	Workwear and PPE	Tools and equipment	Instructions and rules	Workplace	Transport	Employee's reaction
January	1	2	3	4	5	6	7
February	2	3	4	5	6	7	8
March	3	4	5	6	7	8	9

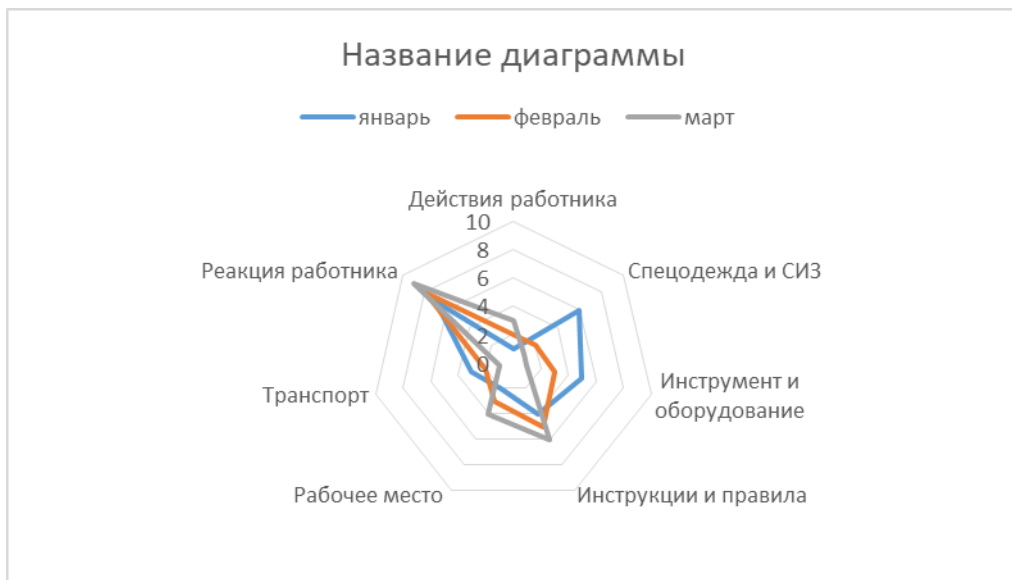


Figure 2 - Example of constructing a change in the Niont of a subdivision during one quarter

9.16. The areas of intersection of N_{iont} areas in the diagram reflect the categories, frequency of criteria with indicators of “danger”, which in relative terms prevail and which need attention and decision-making by management to prevent potentially dangerous events.

9.17. In the BSA process, it is necessary to determine the “area of concern” of a specific structural subdivision of the Subsidiary. The “area of concern” is based on the collected statistics of the risk indicator values for the selected period and is displayed as segments on the axes of the graph representing the categories of observation. The intersection of the established “area of concern” with the calculated area based on the results of audits may be a signal of the presence of prerequisites for an incident. The “area of concern” is determined by the head of the structural subdivision, **workshop, site of the Subsidiary** in consultation with a specialist in occupational safety of the Subsidiary, based on the current traumatism situation for a particular facility.

At the same time, the Company and the Subsidiary should strive to achieve a “zero area of concern” in the process of carrying out its activities in various business processes.

9.18. Data processing results which of the observation categories should be given priority at the current level of occupational safety culture. Based on these results, it is necessary to plan occupational safety measures to reduce the number of violations by category and to carry out risk management in the OSMS.

9.19. Results of the analysis of the obtained BSA data are included in the Consolidated Monitoring Report on Occupational Safety, Industrial Safety and Ecology and are submitted to the Management Board of the Company on a quarterly basis.

10. Corrective measures

10.1. After the BSA, the auditor, the head of the structural subdivision of the Subsidiary, where the BSA was held, together with the OHS Service, develop corrective measures and set deadlines and responsible persons for improving the OHS.

10.2. At the end of the reporting month, based on the results of a summary analysis of the BSA results, the first head of the Subsidiary or his/her deputy, considers the corrective measures proposed by the OHS Service of the Subsidiary. 10.3. Corrective measures should be aimed at a systematic solution to the identified problem, eliminating the root cause or event that may lead to undesirable events or injury to an employee.

10.4. Corrective actions should adhere to the hierarchy of effectiveness:

- 1) eliminating the source of danger;
- 2) isolating the source of danger;
- 3) restricting access to the source of danger.

10.5. Additional corrective measures include:

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 15
----	---	---------

- 1) development of instructions and rules;
- 2) conducting training and briefing;
- 3) installation of warning signs;
- 4) provision of additional PPE, etc.

10.6. If inconsistencies are identified as a result of the BSA, elimination of which is impossible without the allocation of additional resources, the head of the structural subdivision of the Subsidiary sends a memo to the first head of the Subsidiary, containing a description of the identified dangerous situation or dangerous condition, the potential of possible consequences of a dangerous situation or dangerous condition and proposals for its elimination.

Registration, accounting and record storage

Registration, accounting and record storage is carried out by the OHS Service in accordance with the IRDs of the Subsidiary. The records include:

- Schedule for behavioral security audit;
- Report on the results of a behavioral security audit;
- Calculation of the change in the N_0 risk indicator.

12. Responsibility

The heads of the structural subdivisions of the Subsidiary are responsible for:

- implementation of the provisions of this Standard in contractors;
- organization of training/familiarization of employees of structural subdivisions of the Subsidiary on compliance with the provisions of this Standard;
 - Conducting audits and monitoring compliance with the requirements of this Standard;
 - taking the necessary corrective measures and monitoring their implementation within the established time frame;
- ensuring compliance with the provisions of this Standard by contractors performing/rendering work/services on the territory and in the interests of the Company and Subsidiary.

13. Final Provisions

13.1. These Recommendations apply to all Employees of the Company, its Subsidiaries and contractors/subcontractors operating on the territory of the Company's production site and Subsidiaries.

13.2. This Standard is valid from the date of its approval by the authorized body of the Company, Subsidiary.

TO	Standard for Behavioral Security Audit at the Production Facilities of JSC NMC Tau-Ken Samruk and Subsidiaries	Page 16
-----------	---	----------------

Annex 1 Form of the Schedule for Behavioral Security Audit

<p>Agreed</p> <p>_____ position</p> <p>_____ full name</p> <p>_____, 20__</p>	<p align="right">Approve</p> <p align="right">_____ position</p> <p align="right">_____ full name</p> <p align="right">_____, 20__</p>
<p>Schedule for Behavioral Security Audit</p>	

s/i No.	Date	Name of the structural subdivision/facility	Full name of the auditor	Note

Annex 2 Form of the report on the results of a behavioral security audit

Subdivision:			Date:		
Site:			Observers, person:		
Work being done:			Time:		
1. Employee/employees' reaction					
	dangerous	not applicable		dangerous	not applicable
1.1 Readjust the work	<input type="checkbox"/>	<input type="checkbox"/>	1.4. Bends down, hides, leaves	<input type="checkbox"/>	<input type="checkbox"/>
1.2. Changes the position	<input type="checkbox"/>	<input type="checkbox"/>	1.5. Changes or hides the tool	<input type="checkbox"/>	<input type="checkbox"/>
1.3. Puts the PPE in order	<input type="checkbox"/>	<input type="checkbox"/>	1.6. Installs protective devices	<input type="checkbox"/>	<input type="checkbox"/>
			1.7. Stops working	<input type="checkbox"/>	<input type="checkbox"/>
2. Actions of an employee/employees					
	dangerous	not applicable		dangerous	not applicable
2.1. Gets distracted while doing work	<input type="checkbox"/>	<input type="checkbox"/>	Does not protect himself from danger:	<input type="checkbox"/>	<input type="checkbox"/>
2.2. When walking, he/she does not look at his/her feet	<input type="checkbox"/>	<input type="checkbox"/>	2.7. moving objects/vehicles	<input type="checkbox"/>	<input type="checkbox"/>
2.3. He/she doesn't hold on to the handrail on stairs	<input type="checkbox"/>	<input type="checkbox"/>	2.8. Hot/cold surfaces	<input type="checkbox"/>	<input type="checkbox"/>
2.4. Haste during the execution of work	<input type="checkbox"/>	<input type="checkbox"/>	2.9. dangerous substances	<input type="checkbox"/>	<input type="checkbox"/>
2.5. He/she endangers others	<input type="checkbox"/>	<input type="checkbox"/>	2.10. height, falling objects	<input type="checkbox"/>	<input type="checkbox"/>
2.6. He/she works in an unsafe/uncomfortable position	<input type="checkbox"/>	<input type="checkbox"/>	2.11. electric current	<input type="checkbox"/>	<input type="checkbox"/>
			2.12. lack/insufficient lighting	<input type="checkbox"/>	<input type="checkbox"/>
3. Workwear and PPE					
	dangerous	not applicable		dangerous	not applicable
3.1. Workwear and PPE does not correspond to the nature of the work performed	<input type="checkbox"/>	<input type="checkbox"/>	3.4. The employee uses the issued PPE incorrectly	<input type="checkbox"/>	<input type="checkbox"/>
3.2. There are no all necessary items of PPE	<input type="checkbox"/>	<input type="checkbox"/>	3.5. He/she does not apply PPE, does not use collective protection means	<input type="checkbox"/>	<input type="checkbox"/>
3.3. He/she applies faulty (with visible damage) PPE	<input type="checkbox"/>	<input type="checkbox"/>			
4. Tools and equipment					
	dangerous	not applicable		dangerous	not applicable

		.			.
4.1. The tool and equipment do not correspond to the nature of the work performed	<input type="checkbox"/>	<input type="checkbox"/>	4.3 Unused in accordance with the requirements	<input type="checkbox"/>	<input type="checkbox"/>
4.2. There are home-made tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>	4.3. Tools and equipment are defective, with visible damage, do not have the necessary protective equipment (casings, screens, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
5. Instructions and rules					
	dangerous	not applicable		dangerous	not applicable
5.1. Unavailable	<input type="checkbox"/>	<input type="checkbox"/>	5.2. The requirements of relevant instructions and rules are not followed	<input type="checkbox"/>	<input type="checkbox"/>
5.3. Incomprehensible to the staff	<input type="checkbox"/>	<input type="checkbox"/>			
6. Workplace					
	dangerous	not applicable		dangerous	not applicable
6.1. Cluttered, cramped, foreign objects are present	<input type="checkbox"/>	<input type="checkbox"/>	6.3 Tools, equipment, materials are placed irrationally and unsafe	<input type="checkbox"/>	<input type="checkbox"/>
6.2. Slippery floor	<input type="checkbox"/>	<input type="checkbox"/>			
7. Transport					
	dangerous	not applicable		dangerous	not applicable
7.1. Seat belts are missing, defective, or not in use	<input type="checkbox"/>	<input type="checkbox"/>	7.4. Mobile means of communication are used while driving	<input type="checkbox"/>	<input type="checkbox"/>
7.2. The driver's condition does not meet the requirements	<input type="checkbox"/>	<input type="checkbox"/>	7.5. Non-compliance with traffic regulations (speed, signs, markings, distance)	<input type="checkbox"/>	<input type="checkbox"/>
7.3. Dangerous driving style (slam acceleration/deceleration)	<input type="checkbox"/>	<input type="checkbox"/>	7.6. The condition of the vehicle does not meet the requirements	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify): _____					
Measures taken to correct nonconformities: _____					
Behavioral safety audit was held by:					
Position -		signature		Full name	
Position -		signature		Full name	

Example for calculation of the change in the N_0 risk indicator

- Initial data:
 - BSA period: Q1
 - employees audited: January – 05, February - 04, March – 04.
- The BSA data and the calculation results are shown in Table 2 and Figure 3.

Table 2. The values of K_0 , K_n , N_I , N_0 indicators according to the BSA results

Workplace No.	K_0	K_n	N_I	N_0
<i>January</i>				
Employee No. 1	3	2	8.1	7.86
Employee No. 2	5	1	13.1	
Employee No. 3	4	0	10.2	
Employee No. 4	2	0	5.1	
Employee No. 5	1	4	2.8	
<i>February</i>				
Employee No. 6	4	4	11.4	8.95
Employee No. 7	2	3	5.5	
Employee No. 8	4	2	10.8	
Employee No. 9	3	2	8.1	
<i>March</i>				
Employee No. 10	5	5	14.7	8.88
Employee No. 11	5	1	13.1	
Employee No. 12	1	1	2.6	
Employee No. 13	2	0	5.1	

Dynamics of changes in the risk indicator (N_0) in Q1



Fig. 3. Creating a chart of (N0) changes during the reporting period Annex 4

Block diagram of the BSA procedure no

