APPROVED Deputy General Director - Project

Director

A.S. Zaborskiy

MONITORING REPORT

SF_6 destruction at JSC "HaloPolymer, Perm

ITL # RU1000309 Version 1.0

01 October 2012

8th monitoring period:

01.07.2012 - 30.09.2012

Valeriy Andreychatenko, Chief Engineer

Andrey Birt, Head of Technical Department

Project operator:
HaloPolymer Perm OJSC

REFERENCE

1 PROJECT INTRODUCTION

This Monitoring report summarizes operation of the JI project "SF_6 destruction at JSC HaloPolymer Perm" and is aimed on calculation of the emission reductions achieved by the project activity during the period covered by this report.

1.1 Monitoring period[1]

01 July 2012 0:00 to 30 September 2012 23:59.

1.2 Emission reductions for the monitoring period

Current report takes into account CO_2 emission reduction generated during the Monitoring period. Detailed calculations are to be found in section Section 4 "Calculation of emission reductions" of the Monitoring Report.

The actual generation of ERUs for the monitoring period is 1 247 875 tons CO_{2eq}.

1.3 Comments

This is the 7th monitoring report since the determination of the project. The report is prepared in accordance with the determined project design documentation (PDD) "SF_6 destruction at JSC "HaloPolymer Perm" Version 6 dated 02 November 2011. All the data are collected and emission reductions calculation is made in accordance with the procedures described in Section D "Monitoring Plan" of the determined PDD.

On September 15, 2011 the Government of the Russian Federation adopted a resolution #780 "On Measures for the Implementation of Article 6 of the Kyoto Protocol to the UN Framework Convention on Climate Change". This document approves Regulations on the implementation of article 6 of the Kyoto Protocol. According to paragraph 2 of the Resolution, the projects will be approved by the Ministry of Economic Development of the Russian Federation.

The project "SF6 destruction at JSC "HaloPolymer Perm" was approved as a project implemented in accordance with the article 6 of Kyoto Protocol with the Decree of Ministry of Economic Development #131 dd. 16.03.2012.

2 GENERAL PROJECT ACTIVITY

2.1 Title of the project

SF_6 destruction at JSC "HaloPolymer Perm"

2.2 Sectoral scope:

Sector 11: Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride.

2.3 Crediting period

01 January 2008 – 31 December 2012

2.4 Location of the project

The considered project is located in Perm, Perm Krai, Russia. The city is administrative center of the Perm Krai. It was founded in 1723. The population is 991 500 people. "HaloPolymer Perm" is a large enterprise and significant employer in the region.

2.5 Short description of the project (quoted from the PDD version 6.0)

The aim of the project is to destruct SF6 waste streams contributing thus to the improvement of environment situation in Perm-city and to reduction of GHG emissions. SF_6 is a GHG gas with a high global warming potential (GWP) that is 23 900 tons of CO2 equivalent per one ton of SF_6.

Situation existing prior to the starting date of the project (quoted from the PDD Section A.2)

SF_6 production line was put into operation in 1982. During the process a considerable part of sulphur hexafluoride (approximately 20% of SF_6 output) is lost as emissions at rectification columns.

The enterprise has relevant experience of fluorine organic compounds (FOC) destruction. Thermal destruction unit for fluorine

[1] Note: The reason for preparing MR for 3 months instead of a year is the wish of the Buyer to contract the ERU from the project as soon as possible.

organic compounds was installed at the plant and have been successfully operated since 1987. All equipment and technology are certified in compliance with the Russian standards and meet all applicable environmental requirements.

In the absence of the legislative and economic incentives to utilize (or destruct) wastes of SF_6 production the plant would continue to emit the SF_6 containing gaseous wastes in the atmosphere. This situation is the baseline scenario.

Realization of the proposed project activity is implemented under the second stage of modernization of the thermal destruction unit (TDU) and leads to destruction of SF_6 waste streams at the FOC thermal destruction unit and includes the following measures:

- Installation of stillage residue receiver;
- Installation of blowing-off transmission line from SF_6 production to thermal destruction unit with installation of receiver;
- Installation of measuring and control equipment.

For destruction of wastes in TDU the natural gas is directed in the TDU. SF_6 is utilized along with the gaseous wastes of HCFC-22 and monomer-4 production, but in a separate furnace unit of TDU. The technology and equipment for the project are developed by a domestic special-purpose institute and are certified in conformity with the norms of the Russian Federation and meet all environment protection requirements.

2.6 Status of the project implementation

The PDD v.6.0 for the current project was submitted to Bureau Veritas Certification Holding SAS[2] (hereinafter AIE) for determination in September 2011. In course of the determination the PDD was amended and as a result the final version 6.0 was issued 02 November 2011. A positive expert opinion was received for the PDD v.6.0 [3]. The final version 6.0 of the PDD describes the project in full details. The destruction process had been started from 01.01.2008. The date of the first emission reductions is 01 January 2008.

The project was implemented as it is described in the final version 6.0 of the PDD. The starting date of the project is 01.11.07, date when the installation of the project equipment started. The implementation of the project fully corresponds to the implementation schedule presented in the PDD v6.0.
The SF_6 destruction project had been carried out under the second stage of the TDU modernization and included implementation of the following measures:

- Installation of stillage residue receiver;
- Installation of blowing-off transmission line from SF_6 production to thermal destruction unit with installation of receiver;
- Installation of measuring and control equipment.

Currently all actions according to the project are totally completed.

- Stillage residue receiver was commissioned according to the Certificate of acceptance in operation.
- Blowing-off transmission line was commissioned according to the Certificate of acceptance in operation.
- Receiver for waste collection was commissioned according to the Certificate of acceptance in operation.

All equipment had been successfully installed and is fully operational. Project data is being gathered continuously since 01.01.08.

The project has been approved by both Parties involved: Letter of Approval from Russian Federation (Host Party) was issued on 16.03.2012; whereas LoA for Swiss Confederation was issued on 27.04.2012. The copies of LoAs are provided in Appendix 3.

2.7 Deviations or revisions to the PDD and the monitoring plan:

No revisions or deviations were made in the MR. The revisions previously made to the monitoring plan of the PDD are presented in the Appendix 2.

2.8 Contact information on project participants responsible for the monitoring report

Contact person on project participants:

Project operator and investor:

HaloPolymer Perm OJSC, Russian Federation, 614113 Perm, Lasvinskaya str., 98
Pavel Boyko, General director
Tel.:+7 342 250 61 52, info@halopolymer-perm.com
Tel.: +7 342 250 61 52, www.halopolymer.com

[2] Bureau Veritas Certification Holding SAS is an Accredited Independent Entity (AIE)
[3] Positive expert opinion together with the Determination report has been provided to verifiers.

Holding company:
HaloPolymer, Russian Federation, 123056 Moscow, Leningradskiy av., 31A bldg. 1
Alexey Zaborskiy, Project director
Tel: +7 495 725 4400, Alexey.Zaborskiy@halopolymer.com
Tel: +7 495 725 4400, www.halopolymer.com

March 9, 2011 the extraordinary general meeting of shareholders JSC "Halogen" decided to change the brand name of a legal entity and the approval of the charter in the new edition. March 17, 2011 to the Unified State Register of Legal Entities entry was made to change the brand name of "Halogen" on "HaloPolymer Perm" and re-charter in the new edition. Changing the name is not a reorganization, not alter the rights and responsibilities of the entity. Occurring in the text of the Report of the name of the investor "Halogen" and "HaloPolymer Perm" are considered equal.

3 MONITORING PLAN AND RESULTS OF THE PROJECT MONITORING

3.1 Monitoring plan

3.1.1 Methodological approach

3.1.1.1 Baseline methodology

The baseline was developed in compliance with the "Guidance on criteria for baseline setting and monitoring"[4]. The project developer uses JI specific approach, but definitely coordinating it with the requirements set forth in Decision 9/CMP.1, Annex B "Criteria for baseline setting and monitoring"[5]

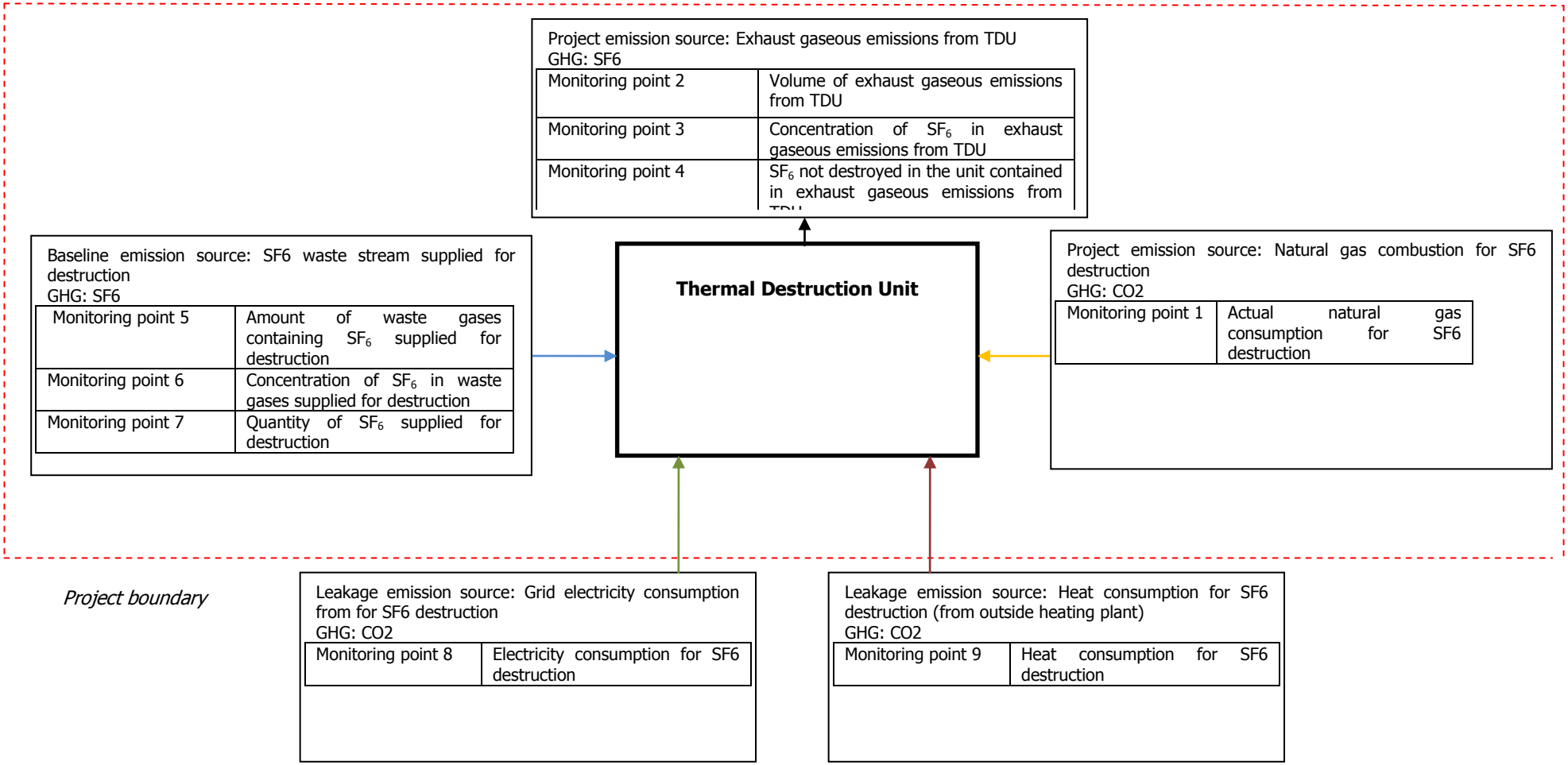
3.1.1.2 Monitoring methodology

Selection of monitoring approach was made in compliance with the "Guidance on criteria for baseline setting and monitoring" version 03 and requirements of the Decision 9/CMP.1, Appendix B "Criteria for baseline setting and monitoring". The project developer used JI specific approach for establishing the monitoring. The monitoring plan data should be stored for at least 2 years after the end of the crediting period and after the last ERU tranche under the project.

3.1.2 Monitored parameters in the project

Project boundaries and monitoring points are in the diagram below:

[4] Guidance on criteria for baseline setting and monitoring (version 03), JISC
[5] Report of the Conference of the parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005. Decision 9/CMP.1 Guidelines for the implementation of Article 6 of the Kyoto protocol. Appendix B Criteria for baseline setting and monitoring. p.12–13.


Project emission source: Exhaust gaseous emissions from TDU
GHG: SF6
Monitoring point 2
Volume of exhaust gaseous emissions from TDU
Monitoring point 3
Concentration of SF_6 in exhaust gaseous emissions from TDU
Monitoring point 4
SF_6 not destroyed in the unit contained in exhaust gaseous emissions from
Baseline emission source: SF6 waste stream supplied for destruction
GHG: SF6
Monitoring point 5
Amount of waste gases containing SF_6 supplied for destruction
Monitoring point 6
Concentration of SF_6 in waste gases supplied for destruction
Monitoring point 7
Quantity of SF_6 supplied for destruction
Thermal Destruction Unit
Project emission source: Natural gas combustion for SF6 destruction
GHG: CO2
Monitoring point 1
Actual natural gas consumption for SF6 destruction
Project boundary
Leakage emission source: Grid electricity consumption from for SF6 destruction
GHG: CO2
Monitoring point 8
Electricity consumption for SF6 destruction
Leakage emission source: Heat consumption for SF6 destruction (from outside heating plant)
GHG: CO2
Monitoring point 9
Heat consumption for SF6 destruction

To calculate the project and baseline CO_2 emissions we estimated the following parameters:

1. The measurement of amount of SF_6 waste supplied for destruction is made by two down-in-line stationary mass flow meters installed on the inlet pipelines to the destruction unit. The readings are automatically collected, stored and processed by Automated Process Control System (APCS). The APCS automatically calculates the conservative value of the SF_6 waste supplied for destruction based on the readings from two down-in-line mass flow meters.
2. The measurement of natural gas consumption is carried out since the start of operation of Kyoto project and is common for both HFC-23 and SF_6 destruction process. Actually the consumption of natural gas has been already taken into account in HFC-23 project and consecutive monitoring reports. But for conservatism sake the same values of natural gas consumption are also applied for SF_6 destruction project.
3. As prescribed in the paragraph 18 of Guidance on criteria for baseline setting and monitoring (Version 03) "Project participants must undertake an assessment of the potential leakage of the proposed JI project and explain which sources of leakage are to be calculated, and which can be neglected. All sources of leakage that are included shall be quantified and a procedure for an ex ante estimate shall be provided. Only those emission sources that account for, on average per year over the crediting period, more than 1 per cent of the difference between project and baseline emissions, or which exceed an amount of 2,000 tonnes of CO2 equivalent, whichever is lower, shall be included. The leakage assessment provided below shows that these emissions are less than 1% of the difference between project and baseline emissions. Nevertheless those emissions will be taken in to account in the monitoring to be conservative.
4. When assessing CO_2 emission factor from heat consumption, it is assumed that the heat efficiency of a combined heat and power plant is 40% . However, according to a scientific article published by Novosibirsk State Technical University the heat production efficiency of CHPP is 54,7%[6]. But we take 40% to be more conservative.

3.1.2.1 GHG gases and source

The following GHG gases and their sources are considered in the monitoring plan (Please see the Table 2 below)

Table 1. GHC gases and their sources

Source	GHG gas
Baseline emission source: Waste SF_6 emissions that were avoided as a result of the project realization	SF_6
Project emission source: SF_6 emissions that were not destructed in TDU	SF_6
Project emission source: Emissions from natural gas combustion for destruction process	CO_2
Leakage source: Consumption of electricity for SF_6 destruction	CO_2
Leakage source: Consumption of heat for SF_6 destruction	CO_2

[6] http://www.esco-ecosys.ru/2010_3/art040.pdf. See Fig. 4.8 "Energy flows of split and combined process" on page 59.

3.1.2.2 Data to be collected according to the monitoring plan (Please see the Table 3):

Table 2. Data to be collected

ID number	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	*Comment*
1. $FC_{NG,SF6y\_fact}$	*Actual natural gas consumption for SF_6 destruction process over a reporting period y*	*Technical report of the head of technical department*	*m^3*	*c*	*monthly*	*100%*	*Electronic/paper*	*Actual natural gas consumption for SF6 destruction is determined each month and is equal to actual consumption of natural gas for HFC-23 destruction. The detailed description on how QA and OC provided are presented below in the table 4.*
2. q_NDy	*Volume of exhaust gaseous emissions from destruction unit over a reporting period y*	*Mobile flow meter*	*m^3*	*m*	*Weekly*	*100%*	*Electronic/paper*	*Measurement of effluent gases from the destruction unit is made by analytical method. For that purpose the speed of effluent gas is measured weekly by portable flow meter. The measurements are documented and summary reports are archived during 10 years. Measurements are used for calculation of effluent gases volume (average effluent gas speed for a period is multiplied by area of the venting pipe and length of period). The detailed description on how QA and OC provided are presented below in the table 4*
3. $w_{SF6,ND\,y}$	*Concentration of SF_6 in gaseous*	*Chromatograph*	*mg/m^3*	*m*	*Weekly*	*100%*	*Electronic/paper*	*Measurement of SF6 concentra-tion in effluent gases are*

ID number	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	*Comment*
	emissions from destruction unit over a reporting period y							*performed by laboratory weekly based on the gas samples from the venting pipe after destruction unit. Gas samples are analyzed based on approved methods, measurements are made by chromatographs. The detailed description on how QA and OC provided are presented below in the table 4.*
4. ND_SF6 y	*Quantity of SF6 not destroyed in the unit during the reporting period y*	*Formula D.1-2*	*t*	*C*	*Quarterly*	*100%*	*Electronic/paper*	*See PDD section D 1.1.2. The detailed description on how QA and OC provided are presented below in the table 4*
5. q_SF_6 y	*Amount of waste gases containing SF_6 supplied for destruction during reporting period, y*	*two mass flow meter*	*Kg*	*m*	*Monthly (continues measurement)*	*100%*	*Electronic/paper*	*Measured directly before thermal destruction unit. Monthly data is the sum of the accumulated data. The detailed description on how QA and OC provided are presented below in the table 4.*
6. $w_{SF6,PJ,}y$	*Concentration of SF_6 in waste gases supplied for destruction during reporting period, y*	*Chromatograph*	*%*	*m*	*Weekly*	*100%*	*Electronic/paper*	*Measured once per day The detailed description on how QA and OC provided are presented below in the table 4.*
7. Q_SF6 y	*Quantity of SF_6 supplied for destruction in the unit during reporting period, y*	*Formula D1-7*	*t*	*c*	*Quarterly*	*100%*	*Electronic/paper*	*See PDD subsection D 1.1.4*

ID number	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	*Comment*
8. EC,y	*Electricity consumption for SF_6 destruction during reporting period, y*	*Technical report of the head of technical department*	*MWh*	*c*	*Monthly*	*100%*	*Electronic/paper*	*Actual electricity consumption for SF6 destruction is determined each month and is equal to actual consumption of electricity for HFC-23 destruction. The detailed description on how QA and OC provided are presented below in the table 4.*
9. HC,y	*Heat consumption for SF6 destruction during reporting period, y*	*Technical report of the head of technical department*	*GJ*	*c*	*Yearly*	*100%*	*Electronic/paper*	*Actual heat consumption for SF6 destruction is determined each month and is equal to actual consumption of heat for HFC-23 destruction. The detailed description on how QA and OC provided are presented below in the table 4.*

3.1.3 QA/QC for the project monitoring

Table 3. QA/QC for the project monitoring

Data	**Uncertainty level of data (high/medium/low)**	**Explain QA/QC procedures planned for these data, or why such procedures are not necessary.**
$FC_{NG,SF6y\_fact}$	*low*	*Actual natural gas consumption for SF_6 destruction is equal to that of HFC23 destruction which is estimated with the use of approved consumption norms taking into account actual overconsumption or saving of natural gas over the past months. The calculation is provided each month by the production manager of shop 26 according to the Method of calculation of natural gas consumption for combustion of separate waste types approved by Chief Engineer of JSC Halogen on 29/08/08. The calculation checked and analyzed against the natural consumption in previous periods by the head of Technical Department. The initial information for the calculation includes the readings on the consumption of the natural gas for destruction of all waste substances. Such readings are made with a flow meter complex consisting of Standard diaphragm DKS-06-80-A/B-1; Differential pressure gauge AIR-20-DD and Gas corrector SPG-762. The accuracy of the readings is ensured by the periodical calibration of the flow meter complex. The calibration period for Standard diaphragm DKS-06-80-A/B-1 is 5 years and expires in IIIrd Quarter of 2013; for Differential pressure gauge AIR-20-DD is 2 years and expires in IInd Quarter of 2012; and for Gas corrector SPG-762 is 4 years and expires in IIIrd Quarter of 2014. Calibration of DKS is provided by the specialists of JSC "HaloPolymer Perm". Calibration of Differential pressure gauge AIR-20-DD is provided by JSC "Elemer", Zelenograd, Moscow oblast. Calibration of Gas corrector SPG-762 is provided by ZAO "Logika", Saint-Petersburg.* *According to GHG Monitoring Standard 2-069-2012 initial readings from the flow meter complex on the natural gas consumption are kept in paper and electronically with the head of the production shop 26 during 10 years; the calculation results on consumption of the natural gas for HFC-23 destruction are kept in paper and electronically with the head of Technical Department during 10 years.*
q_NDy	*low*	*The measurement is provided by portable flow meter TESTO according to Quantitative Chemical Analysis of Air. The accuracy of data is provided by calibration of TESTO by NPO "ECO INTEX", Moscow. The calibration period of the TESTO is 1 year and expires in IInd Quarter of 2012. According to GHG Monitoring Standard 2-69-2012 initial readings are kept with the engineer of the air laboratory in paper and electronically during 10 years. The head of Technical department keeps the information on not destroyed emissions during 10 years in paper and electronically.*
$w_{SF6,ND\,y}$	*low*	*Chromatograph LKhM-80 is used. Procedure of measurement of SF6 mass concentration in the air of the working zone and in the industrial emissions by gas-chromatographic method. # 469-00-2010 signed by Chief Metrologist and approved by Chief Engineer dd 19/03/2010. The calibration is provided yearly by Perm Centre for Standardization, Metrology and Certification according to the calibration method. Cross-checked with the previous chromatograph analysis is provided. Printed chromatogram and calibration records are kept during 10 years with the engineer of the air laboratory.*

Data	Uncertainty level of data (high/medium/low)	Explain QA/QC procedures planned for these data, or why such procedures are not necessary.
q_SF$_6$ y	*low*	*According to QMS, the measurement, processing and storage of data on utilization of SF6 waste streams in TDU is carried out by the Automated Process Control System, namely "'APCS of SF6 waste stream utilization". The APCS is established on a base of a programme-technical complex (PTC): SCADA-system "Cascade" (Cheboksary, Russia) and of a multifunctional microprocessor controller "Contrast" KP-500.SF6 waste streams are measured with two on-line mass flow meters PROMASS 83F15. Data from mass flow meters over two parallel channels come in modules of communication devise with object (CDO), which are included in the set the "Contrast" KP-500 controller. Having been processed the information is channeled in the work stations. Failure-tolerance of the system and data safety are guaranteed by two work stations (main and standby) working in a "hot" backup mode. Relative error of PROMASS Flow meter is 0,1%. Recalibration interval of mass flow meters is 4 years. Recalibration is provided by laboratory of the company "Endress+Hauser Flowtec AG"Quantity of SF6 not destroyed in the unit during the reporting period is determined each month with application of data (ID-4 and ID-5) that measured with checked and calibrated instruments. According to Standard daily and monthly reports on waste flows containing SF6 are kept during 10 years with the head of Technical Department.*
$W_{SF6,PJ,y}$	*low*	*Sampling of SF6 waste stream for determination of SF6 concentration is carried out according to the approved procedure M14UK2011 "Procedure of measurements of mass shares of oxygen, nitrogen, tetrafluormethane and sulphur hexafluoride in SF6 wastes by chromatographic method". Measurements are provided by 2 chromatographs (Cristallux-4000M) according Recalibration interval is 4 years. The calibration is provided yearly by Perm Centre for Standardization, Metrology and Certification. . According to Standard daily and monthly reports on waste flows containing SF6 are kept during 10 years with the head of Technical Department. Printed chromatogram and calibration records are kept during 10 years with the engineer of the air laboratory. The logs on concentration of waste gases at the entrance of TDU are kept in paper with the head of laboratory. The information references on SF6 concentration in waste gases are kept with the head of Technical department during 10 years.*
Q_SF6 y	*low*	*Quantity of SF_6 supplied for destruction is determined each month with application of data (ID-7 and ID-8) that measured with checked and calibrated instruments.*
EC,y	*low*	*Electricity consumption for SF6 destruction is equal to that of HFC23 destruction which is calculated by the project manager of the shop 26 and checked by the head of Technical Department against the electricity consumption over the previous months. Electricity consumption of HFC-23 destruction is determined with the use of planned norms. The planned norms are determined on a base of actual electricity consumption for TDU operation over long-term historical period. If considerable distortion is found the reason of that is analyzed in order to eliminate. According to Standard the information reference of electricity consumption is kept with the head of Technical Department during 10 years in paper and electronically.*
HC,y	*low*	*Heat consumption for SF6 destruction is equal to that of HFC23 destruction which is calculated by the project manager of the shop 26 and checked by the head of Technical Department against the electricity consumption over the previous months. Heat consumption of HFC-23 destruction is determined with the use of planned norms. The planned norms are determined on a base of actual heat consumption for TDU operation over long-term historical period. If considerable distortion is found the reason of that is analyzed in order to eliminate. According to Standard the information reference of heat consumption is kept with the head of Technical Department during 10 years in paper and electronically.*

3.1.3.1 Personnel training

Training of workers and maintenance qualification upgrade for personnel has been made during the project realization.

3.1.3.2 The operational and management structure applied in order to implement the monitoring plan

All aspects of organizational and management structure of monitoring plan of SF6 destruction project are in compliance with the effective Quality Management Standard STO 2-069-2012 "Procedure of process organization for destruction of wastes containing HFC-23 and SF_6" adopted at OJSC "HaloPolymer Perm" on 11.03.2012 by the Order # 66 signed by General Director. Under the QMS, the head of Technical Department (TD) is a key focal point at the plant responsible for gathering of relevant parameters and submission of input monitoring data for elaborating a monitoring report. According to QMS the information addressed to him is coming from the following sources:

1. SF_6 waste streams. These data is supplied, daily and weekly, from the engineer-technologist of the shop 22 at which SF_6 is produced:
   - The engineer-technologist prepares and prints out daily reports on SF6 waste streams with a by-hour breakdown in accord with the adopted form[7].
   - The engineer-technologist prepares and prints out monthly reports on SF6 waste streams with a by-day breakdown in accord with the adopted form[8].

   The head of TD checks and signs the reports.
2. SF_6 concentration in waste streams. These data is provided from Quality Management Laboratory. Sampling of SF6 waste streams at the inlet of TDU is carried out by technological service of the shop according to a schedule of analytical control. Under analysis two parallel evaluations are carried out (two chromatograms are recorded, calculated and printed out). Lab assistant fills in a chromatogram certificate that indicates a position, the date and time of sampling and surname of an operator[9]. At the end of analysis each file of chromatogram must be automatically stored in appropriate database of a personal computer that services the chromatograph. A printed out protocol must include filled chromatogram certificate, chromatogram's curve and the table of peaks with calculation results. Printed out copies are attached in the special file. The head of QM Laboratory controls the accuracy of analysis and the results. Based on monthly data the head of QM Laboratory prepares a report on SF6 mass concentration (%) in a waste stream for all sampling points with attachment of the results of analysis and calculated average monthly concentration. The report is checked and signed by the head of the shop.
3. SF_6 quantity and concentration in waste streams not destroyed in TDU. These data are provided from the head of air service laboratory. Initial information on analysis of SF_6 concentration in exhaust gases and measuring velocity of exhaust gas stream are prepared by the lab assistant and are registered with the log. Further on the lab engineer prepares weekly and monthly reports on analysis of SF_6 concentration and calculation of exhaust emissions and submits reports to the head of air service laboratory for approval.
4. Time of operation work of TDU. The head of shop 26 (in this shop the thermal destruction unit is installed) provides approved monthly reports to the head of TD. This data is supplied from the production manager of the shop who gathers information from the automated control system.
5. Natural gas consumption for SF6 destruction. This quantity equals to the consumption of natural gas for HFC-23 destruction. This information is submitted from the production manager of the shop 26. The initial data on measurement of total natural gas consumption is gathered and processed by the engineer-planimetrist. The results are provided to the chief metrologist who approves and send them to the production manager of the shop 26. The production manager of the shop 26 calculates each month the planned total natural gas consumption and actual natural gas consumption for destruction of HFC-23.

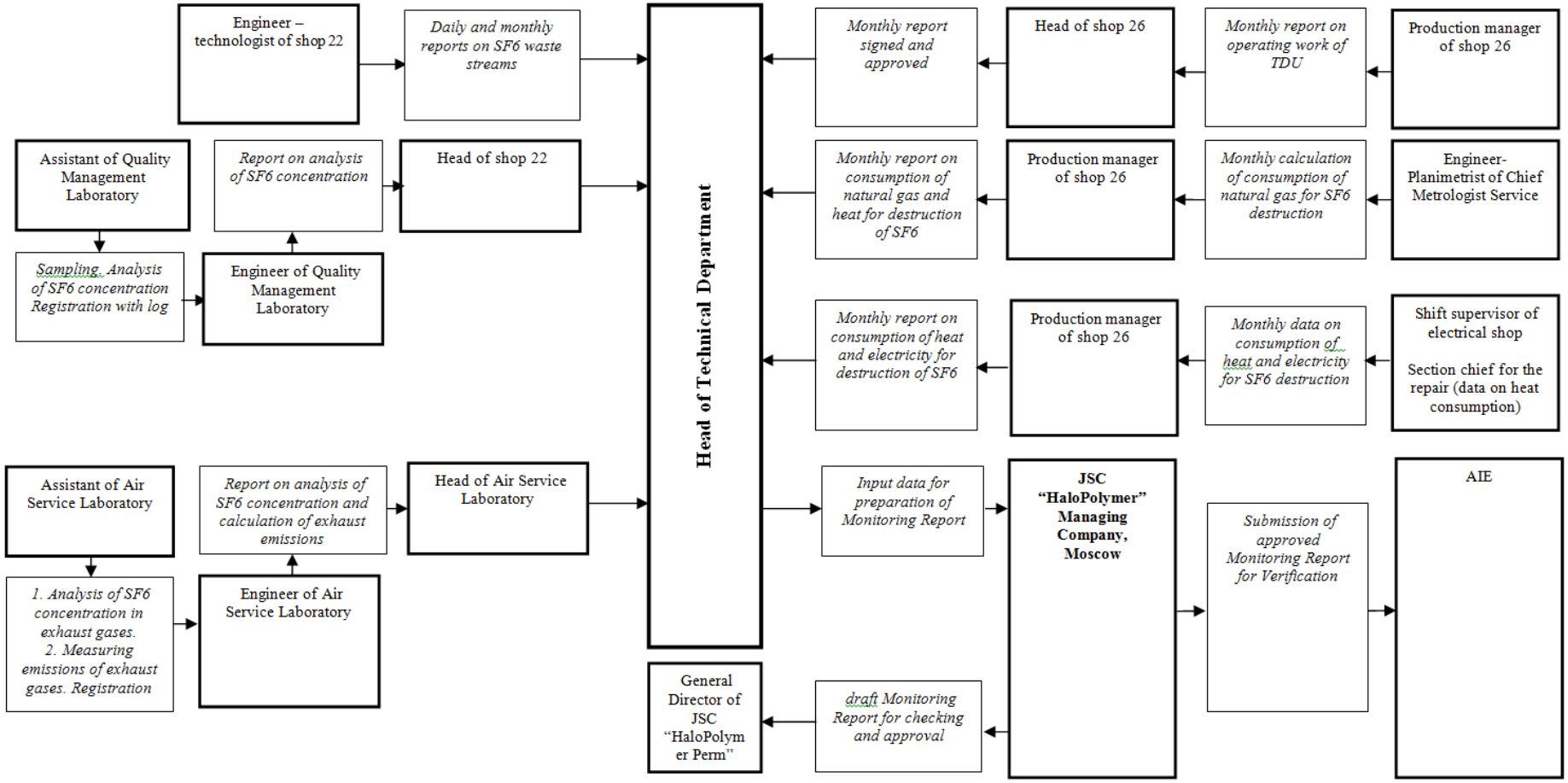
[7] See form in the PDD Annex 3. Monitoring Plan
[8] See form in the PDD Annex 3. Monitoring Plan
[9] See the form in PDD Annex 3. Monitoring Plan.

6. Electricity and heat consumption for SF6 destruction. These quantities equal to consumption of the electricity and the heat for HFC-23 destruction. This information provided monthly to the head of Technical Department by the production manager of the shop 26. The production manager calculates the monthly heat and electricity consumption multiplying the SF6 waste quantity supplied for destruction by the planned consumption norm of heat or electricity.

Finally the head of TD processes the gathered information and submits it to a managing company, OJSC "HaloPolymer", Moscow. Based on the input data the draft Monitoring Report is prepared and submitted it back to OJSC "HaloPolymer Perm" for approval by the General Director. The approved MR is submitted by OJSC "HaloPolymer" to AIE for verification. Further on the organizational chart of the monitoring for SF6 destruction project is provided.

3.1.3.3 Organizational chart of the monitoring for SF_6 destruction project

Figure 1



Calculations of emission reductions will be prepared by specialists of JSC "HaloPolymer" in the end of each reporting period. All data will be stored in paper and electronically at least for two years after the last ERU tranche under the project.

4 CALCULATION OF EMISSION REDUCTIONS

GHG project emissions during the 3rd quarter of 2012, tCO_2e:

$PE_y = ND\_SF_{6\,y} \times GWPSF_6 + FC_{NG,SF6y\_fact} \times CF_{NG} \times EF_{CO2,NG} \times 10^{-6}$ (1)

Where

$ND\_SF_{6\,y}$ is the quantity of SF_6 not destroyed in the unit during the reporting period *y*, t;

GWP SF_6 is the Global Warming Potential (GWP) for SF_6, t CO_2e/t SF_6. The approved GWP value for SF_6 is 23 900 t CO_2e/t SF_6 for the first commitment period under the Kyoto Protocol.

$FC_{NG,SF6y\_fact}$ is the actual natural gas consumption for SF_6 destruction process over a reporting period *y*, m^3. Historically, since 2008, determining the natural gas consumption for incineration of GHG in TDU has been common for both gases, HFC23 and SF6 and was equal to the consumption of the natural gas for HFC23 destruction. The values of natural gas consumption for HFC23 destruction are provided in the Monitoring Report for 01.01.2012 – 31.03.2012 of the project "HFC23 destruction at JSC Halogen, Perm". To provide conservatism the same values are applied for consumption of the natural gas for destruction of SF6.

CF_{NG} – conversion-to-energy units factor for natural gas, equals to 33,812 TJ/mln m^3;[10]

$EF_{CO2,NG}$ – CO_2 emission factor for the natural gas combustion, equals to 56,1 tCO_2/TJ;

$PE_{CO2,NG} = FC_{NG} \times CF_{NG} \times EF_{CO2} \times 10^{-6}$ (2)

$PE_{CO2,NG}$ is the project emissions due to natural gas consumption, tonnes of CO2.

Table 5. Calculated CO2 project emissions associated with natural gas consumption for SF6 destruction

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Natural gas consumption for destruction process	FCNGy	m3	15249	23009	21965	**60 223**
2.	Conversion to energy units factor for natural gas	CFNG	TJ/mln m3	33,812	33,812	33,812	
3.	CO2 emission factor for the natural gas combustion	EFCO2,NG	tCO2/TJ	56,1	56,1	56,1	
4.	Project emissions due to natural gas consumption	PECO2,NG	tCO2e	29	44	42	**114**

$ND\_SF_{6\,y} = q\_ND_{\,y} \times w_{SF6,ND\,y} \times 10^{-9}$ (3)

q_ND y is the volume of exhaust gaseous emissions from destruction unit over a reporting period *y*, m^3;

$w_{SF6,ND\,y}$ – is the concentration of SF_6 in gaseous emissions from destruction unit, mg/m^3

$PE\_SF6\ y = ND\_SF_{6\,y} \times GWPSF6y$ (4)

[10] This value is taken from National Report on Cadaster of Anthropogenic Emissions from Sources and Absorption by Sinks of Greenhouse Gases Not Regulated by Montreal Protocol for 1990-2009. Part 1. Moscow, 2011. Table 3.5, page 38.

Table 6. Calculated project emissions of SF_6 not destroyed in TDU, in tons of CO_2 equivalent

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Volume of gaseous emissions from destruction unit	q_NDy	m3	6035585	7124074	8184456	**21 344 115**
2.	Concentration of SF6 in gaseous emissions from destruction unit	w_SF6_ND,y	mg/m3	0,1	0,1	0,1	
3.	Quantity of SF6 not destroyed in the unit during the reporting period	ND_SF6 y	t	0,000604	0,000712	0,000818	**0,002134**
4.	Global Warming Potential of SF6	GWPSF6y	tCO2/tSF6	23900	23900	23900	
5.	Project emissions of SF6 not destroyed in the TDU	PE_SF6 y	tCO2e	14	17	20	**51**

PE_SF6 y is the project emissions of SF6 not destroyed in the TDU over a reporting period *y*, tonnes of CO2 equivalent

GWPSF6y — is Global Warming Potential of SF6, tonnes of CO2/tonne of SF6.

Table 7. Total GHG project emissions

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Project emissions of SF6 not destroyed in the TDU	PE_SF6 y	tCO2e	14	17	20	**51**
2.	Project emissions due to natural gas consumption	PECO2,NG	tCO2e	29	44	42	**114**
3.	**Total project emissions**	**PE**	**tCO2e**	**43**	**61**	**61**	**165**

GHG baseline emissions during the 3rd Quarter of 2012, tCO_2e:

$$BE_y = Q\_SF_{6\,y} \times GWPSF_{6\,y} \quad (5)$$

Where

$Q\_SF_{6\,y}$ is the quantity of SF_6 supplied for destruction in the unit during the reporting period y, tSF_6

$$Q\_SF_6\,y = 0{,}001 \times q\_\,SF_6\,y \times w_{SF6,y} \times 10^{-2} \quad (6)$$

$q\_\,SF_6\,y$ is the amount of waste gases containing SF_6 supplied for destruction, kg;

$w_{SF6,y}$ is the concentration of SF_6 in waste gases supplied for destruction, %.

Table 8. Calculated baseline emissions, in tonnes of CO2 equivalent

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Amount of SF6 waste supplied for destruction	q_SF6	kg	18 977,90	18 193,00	24 428,70	**61 599,60**
2.	Concentration of SF6 in the waste stream supplied for destruction	WSF6,y	%	85,02	85,08	84,41	
3.	SF6 quantity supplied for destruction	Q_SF6y	t	16,14	15,48	20,62	**52,23**
4.	Global Warming Potential of SF6	GWPSF6y	tCO2/tSF6	23 900	23 900	23 900	
5.	**Baseline SF6 emissions (in terms of CO2)**	**BE**	**tCO2**	**385 627**	**369 939**	**492 824**	**1 248 390**

Leakage during the 3rd Quarter of 2012, tCO_2e:

CO2 emissions associated with grid electricity supply for SF6 destruction

Such emissions are determined according to the formula:

$$LE_{ELEC,y} = ECy \times EF_{CO2,ELEC,y} \times 10^{-3} \quad (7)$$

Where

ECy is consumption of the electricity for destruction of SF_6, MWh. Historically, since 2008, determining the electricity consumption for incineration of GHG in TDU has been common for both gases, HFC23 and SF6 was equal to the consumption of the electricity for HFC23 destruction. The values of electricity consumption for HFC23 destruction are provided in the Monitoring Report for 01.01.2012 – 31.03.2012 of the project "HFC23 destruction at JSC Halogen, Perm". To provide conservatism the same values are applied for consumption of the electricity for destruction of SF6.

$EF_{CO2,ELEC,y}$ – CO2 emission factor for the grid electricity, tCO2/MWh.

The values are provided in the following table:

Table 9. CO2 emissions due to electricity consumption for destruction of SF6

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Electricity consumption	EC,y	MWh	148,541	146,193	177,94	**472,674**
2.	CO2 emission factor for grid electricity[2]	EFCO2,ELEC, y	tCO2/MWh	0,711	0,711	0,711	
3.	CO2 emissions due to electricity consumption for destruction of SF6	LEELEC,y	tCO2	106	104	127	**336**

Leakage CO2 emissions associated with heat supply for SF6 destruction.

$$LE_{HEATy} = HCy \times EF_{CO2,NG} \times 10^{-3}; \quad (8)$$

HCy is the consumption of the heat for destruction unit, GJ. Historically, since 2008, determining the heat consumption for incineration of GHG in TDU has been common for both gases, HFC23 and SF6 and was equal to the consumption of the heat for HFC23 destruction. The values of heat (steam) consumption for HFC23 destruction are provided in the Monitoring Report for 01.01.2012 – 31.03.2012 of the project "HFC23 destruction at JSC Halogen, Perm". To provide conservatism the same values are applied for consumption of the heat for destruction of SF6.

$EF_{CO2,NG}$ – CO_2 emission factor for heat consumption tCO_2/TJ. This factor equal to 140,3 tCO_2/TJ and is determined by division of CO_2 emission factor for the natural gas[11] (56,1 tCO2 – the value is taken from 2006 IPCC Guidelines for National GHG Inventories) in 0,4 (heat efficiency of a combined heat and power plant).

Table 10. CO2 emissions due to heat consumption for destruction of SF6

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Heat consumption	HC,y	GJ	29,129	28,669	34,895	**92,693**
2.	CO2 emission factor for heat consumption	EFCO2,HEAT,y	tCO2/TJ	140,3	140,3	140,3	
3.	CO2 emissions due to heat consumption for destruction of SF6	LE HEAT,y	tCO2	4	4	5	**13**

[11] Main type of fuel for heat and power plants in Perm krai.

Total leakage CO2 emissions

$LE_y = LE_{ELEC,y} + LE_{HEATy}$ (9)

Table 11 Total leakage emissions

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	CO2 emissions due to electricity consumption for destruction of SF6	LEELEC,y	tCO2	106	104	127	**336**
2.	CO2 emissions due to heat consumption for destruction of SF6	LE HEAT,y	tCO2	4	4	5	**13**
3.	**Total leakage emissions**	**LE**	**tCO2**	**110**	**108**	**131**	**349**

Emission reductions during the 3rd Quarter of 2012 in t CO_2e are calculated as follows:

$ER_y = BE_y - PE_y - LE_y$ (10)

Table 12. Emission reductions over the reporting period of 3rd quarter of 2012

#	Item	Designation	Unit	July.2012	Aug.2012	Sept.2012	Total
1.	Baseline SF6 emissions (in terms of CO2)	BE	tCO2e	385 627	369 939	492 824	**1 248 390**
2.	Total project emissions	PE	tCO2e	43	61	61	**165**
3.	Total leakage emissions	LE	tCO2e	110	108	131	**349**
4.	**Emission reductions**	**ER**	**tCO2e**	**385 474**	**369 770**	**492 632**	**1 247 875**

5 ENVIRONMENTAL IMPACT

The environmental work is conducted by the enterprise in the area of air protection, protection of water, recycling of wastes. HaloPolymer Perm fully obeys all requirements of Russian legislation on the environmental protection.

"HaloPolymer Perm" regularly makes payments for negative impact on the environment. The company has been developed and agreed with authorities in the prescribed manner:

- Design of limits of maximum permitted emissions;
- Design of limits of permitted discharges water bodies;
- Design of limits of wastes generation and disposal.

Monitoring compliance with environmental protection legislation is implemented in the course of inspections and audits conducted by inspecting agencies and HaloPolymer Perm department of environmental protection.
Article 32 of the Federal Law on Environmental protection #7-FZ prescribes that: "Environmental impact assessment is conducted for economic and other projects, which may directly or indirectly influence the state of the environment, irrespective of ownership type of the subjects of economic and other activities."

5.1 Impact on the air

As a result of thermal destruction there is no increase in the amounts of sulfur hexafluoride emissions into the atmosphere is going to happen. The degree of purification of the main component (SF6) is not lower than 99.99%, the content of sulfur hexafluoride in the exhaust gases from the unit below the sensitivity of the method (less than 0.1 mg/m3).

5.2 Wastewater and their impact

During destruction of sulfur hexafluoride in the thermal destruction unit an additional volume of wastewater containing salts of NaCl and Na2SO4 is produced. The total discharge of harmful substances in the water body (reservoir Votkinskoye) does not exceed the established limits.

5.3 Wastes and their impact

Solid wastes, which are additionally formed during sulfur hexafluoride destruction, are the chemical sludge of the wastewater treatment plant at the neutralization station. They are accumulated at the sludge storage.

On the basis the environment impact assessment due to the project implementation the followings findings can be set as follows:

- The project envisages the creation of the installation of high technical level that guarantees safety for its ecological environment;
- The installation will be provided by qualified personnel with experience with similar chemicals and waste;
- The project provides for conservation measures that reduce to the minimum possible negative impact on the environment (emission coefficient of purification of the gas mixture is 99.99%, the formation of liquid and solid industrial wastes within the established limits and permits).

The technical solutions under the proposed project will reduce its environmental impacts and have the following effects:

- Compliance with environmental requirements, reduction of emissions of air pollutants
- Prevention of pollution of water basins above the applicable environmental standards
- Prevention of pollution of territory, surface and ground waters, provided that the requirements for industrial waste storage, disposal and utilization are met.

Moreover, due to the project, the greenhouse gas emissions of JSC "HaloPolymer Perm" will be significantly reduced.

Since the beginning of 2010 the OJSC "HaloPolymer Perm" has been developing a justification of the maximal permissible emissions (the volume of MPE). Currently the draft volume of MPE undergoes approval process with supervisory organization.

In 2008 the Company voluntarily addressed Western Ural Department of the Federal Service on Environmental, Technology and Nuclear Supervision (RosTechNadzor) with a proposal to set Maximal Permissible Emission on SF6. In 2009 RosTechNadzor established such MPE in the amount of 18,703 tonnes of SF6. The calculation of project emissions of not destroyed SF6 demonstrates an insignificant level of SF6 emissions[12] which are far less than the set MPE level.

[12] See PDD table E.1-2 "Estimated SF6 project emissions" of E1 section "Project emissions", line 4.

In 2011 the Company addresses an expert organization "BELZ" which carried out the calculation of MPE subject to compliance with the maximal permissible concentration on a boundary of the sanitary-protection zone. The calculation demonstrated that such MPE is 10 times higher than SF6 production capacity of JSC "HaloPolymer Perm". This proves that the project provides no transboundary effects.

5.4 Control of pollutant emissions

On the ground of Time Schedule for MPE Compliance Control on emission sources of OJSC "HaloPolymer Perm" approved by Chief Engineer and by a Volga regional office of Federal State Agency "Center of Laboratory Analysis and Technical Measurements" the plant's air service laboratory implements the control for atmospheric pollutant emissions. The thermal destruction unit is registered as a source # 478. Gaseous effluents of HCl, HF, and NO_X are regularly measured on this source. Consolidated amount of atmospheric pollutant emissions is included in the annual report 2-TP (air), which is submitted to Federal Service for Nature Management (Rosprirodnadzor). Additionally to the control program implemented by OJSC "HaloPolymer Perm" the Bashkir Republican Scientific-Research Environmental Center monitors dioxins emissions with periodicity of 2 times in a year.
Over the period of implementation of SF6 destruction project there have not been incidents associated with exceeding of consolidated annual pollutant emissions.

6 RESPONSE TO OPEN ITEMS FROM PREVIOUS REPORTS

APPENDIX 1. STATUS OF QA AND QC PROCEDURE

Monitoring points	Item	Metering device	Manufacturer's number	Manufacturer	Year of issue	Date of calibration	Date of next calibration	Calibration interval	Calibration certificate number
1	$FC_{NG,SF6\_fact}$ Actual natural gas consumption for SF_6 destruction process over a reporting period y	The values of natural gas consumption for SF6 destruction is equal to that of HFC23 destruction which is provided in the MR for 01.10.11-31.12.11 of the project "HFC23 destruction at JSC Halogen, Perm"	-	-	-	-	-	-	-
	The initial information for calculation of includes the readings of all wastes coming in TDU. The metering of this consumption is provided with a flow metering complex which includes: standard diaphragm DKS-06-80-A/B-1, differential manometer AIR-20DD and gas corrector SPG-762	Flow metering complex:							
		Standard diaphragm DKS-06-80-A/B-1	2367	JSC "Halogen", Perm		17.07.2008	17.07.2013	5 years	Record in technical certificate
		differential manometer AIR-20DD	20-61893	OOO NPP "Elemer", Zelenograd, Moscow region	2008	12.05.2010	12.05.2013	3 years	Record in technical certificate
		gas corrector SPG-762	1333	ZAO NPF "Logika", Saint-Petersburg	2006	10.09.2010	10.09.2014	4 years	15-27-2010
2	Q_NDy Volume of exhaust gaseous emissions from destruction unit over a reporting period y	Portable flow meter (thermoanemometer) TESTO-416	1492092	NPO "ECO-INTEX", Moscoq	2008	26.04.2012	26.04.2013	1 year	08/2387
3	$W_{SF6,ND,y}$	Chromatograph "Cristallux-4000"	256	OOO "NPF Metakhrom", Yoshkar-Ola	2005	29.08.2012	28.08.2013	1 year	16/7656
4	ND_SF6,y Quantity of SF6 not destroyed in the unit during the reporting period, y	Formula D.3 (in MR)	-	-	-	-	-	-	-
5	Q_SF6,y Amount of waste gases containing SG6 supplied for destruction during reporting period y	Mass flow meter PROMASS 83F08	E5033A02000	Endress+Hauser Flowtec AG, Germany	2011	01.05.2011	01.05.2015	4 years	E5033A02000/11
			E5033B02000		2011				E5033B02000/11
6	$W_{SF6,PJ,y}$ Concentration of SF6 in waste gases supplied for destruction during reporting period y	Chromatograph "Cristallux-4000"	306	OOO "NPF Metakhrom", Yoshkar-Ola	2005	29.08.2012	29.05.2013	1 year	16/4665
7	Q_SF6y Quantity of SF6 supplied for destruction in the unit during reporting period, y	Formula D.6 (in MR)	-	-	-	-	-	-	-
8	ECy Electricity consumption for SF6 destruction during reporting period y	Electricity consumption for SF6 destruction is equal to that of HFC23 destruction which is provided in the MR for 01.10.11-31.12.11 of the project "HFC23 destruction at JSC Halogen, Perm"	-	-	-	-	-	-	-
9	HCy Heat consumption for SF6 destruction during reporting period y	Heat consumption for SF6 destruction is equal to that of HFC23 destruction which is provided in the MR for 01.10.11-31.12.11 of the project "HFC23 destruction at JSC Halogen, Perm"							

APPENDIX 2. DEVIATIONS OR REVISIONS IN THE MONITORING PLAN OF PDD

In compliance with the paragraph 41 of the "Guidance on criteria for baseline setting and monitoring, Version 03" the project participants are encouraged to improve the monitoring process and its results. Revisions, if any, to the monitoring plan to improve the accuracy and/or applicability of information collected shall be justified by the project participants and shall be submitted for the determination referred to in paragraph 37 of the JI guidelines by the AIE. In this case the AIE shall determine whether the proposed revisions improve accuracy and/or applicability of information collected, compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishments of monitoring plans and in case of a positive determination, shall proceed with the determination referred to in paragraph 37 of the JI guidelines.

The deviations provided to the established monitoring plan of the final version 6.0 of the PDD concern defining the consumption of natural gas, electricity and heat for SF6 destruction. To improve applicability of information and adhere to principles of conservatism introduced in the PDD the values of such parameters are assumed be equal to those which were defined for destruction of HFC-23 under monitoring of the emission reductions due to realization the project "HFC-23 destruction at JSC "Halogen, Perm".

The detailed description and the reasons of deviations applied are provided in the following table.

As described in the PDD	Applied in the MR	Reasons for deviation
Formula (D.1.-2) for determining the actual natural gas consumption: FCNG,SF6,y_fact = FCNG,SF6,y_plan * FCNGy_total_measured/ FCNGy_total_plan FCNG_total measured is the measured total consumption of natural gas for destruction of all wastes incinerated in the TDU over a reporting period y, m3; FCNG_total_plan - is the planned total consumption of natural gas for destruction of all wastes incinerated in the TDU, over a reporting period y m3. The estimate of the planned total consumption is provided by the production manager of the shop 26. FCNG,SF6,y_plan is the planned natural gas consumption for SF6 destruction process over a reporting period y, m3 (D.1.-3) FCNG,SF6,y_plan = 0,001 *q_ SF6 y * SFCNG,SF6_plan (D.1.-4) SFCNG,SF6_ is specific natural gas consumption for destruction of SF6; as SFCNG,SF6 the planned norm of	$FC_{NG,SF6y\_fact}$ is the actual natural gas consumption for SF_6 destruction process over a reporting period *y*, m^3. Historically, since 2008, determining the natural gas consumption for incineration of GHG in TDU has been common for both gases, HFC23 and SF6 and was equal to the consumption of the natural gas for HFC23 destruction. The values of natural gas consumption for HFC23 destruction are provided in the Monitoring Report for 01.10.2011 – 31.12.2011 of the project "HFC23 destruction at JSC Halogen, Perm". To provide conservatism the same values are applied for consumption of the natural gas for destruction of SF6.	For the reason of improvement of applicability. The values of natural gas consumption have already been found in the MR for HFC23 destruction project. Having been verified they immediately are valid for SF6 destruction process.

As described in the PDD	Applied in the MR	Reasons for deviation
natural gas consumption for destruction of GHG gases is assumed to be conservative, ths m3/t; q_ SF6 y is the amount of waste gases containing SF6 supplied for destruction over a reporting period y, kg		
ECy is consumption of the electricity for destruction of SF6, MWh; ECy = SECELEC,y * q_SF6,y (D.1-9) SECELEC,y - is the specific electricity consumption for SF6 destruction, MWh/t13; q_SF6,y - the amount of waste gases containing SF6 supplied for destruction the reporting period y, t;	ECy is consumption of the electricity for destruction of SF_6, MWh. Historically, since 2008, determining the electricity consumption for incineration of GHG in TDU has been common for both gases, HFC23 and SF6 was equal to the consumption of the electricity for HFC23 destruction. The values of electricity consumption for HFC23 destruction are provided in the Monitoring Report for 01.10.2011 – 31.12.2011 of the project "HFC23 destruction at JSC Halogen, Perm". To provide conservatism the same values are applied for consumption of the electricity for destruction of SF6.	For the reason of improvement of applicability. The values of electricity consumption have already been found in the MR for HFC23 destruction project. Having been verified they immediately are valid for SF6 destruction process.
HCy is the consumption of the heat for destruction unit, GJ; $HCy=SHC,_{HEAT,y} * q\_SF6,y$ (D.1-11) $SHC,_{HEAT,y}$ - is the specific heat consumption for SF6 destruction, GJ/t[14];	HCy is the consumption of the heat for destruction unit, GJ. Historically, since 2008, determining the heat consumption for incineration of GHG in TDU has been common for both gases, HFC23 and SF6 and was equal to the consumption of the heat for HFC23 destruction. The values of heat (steam) consumption for HFC23 destruction are provided in the Monitoring Report for 01.10.2011 – 31.12.2011 of the project "HFC23 destruction at JSC Halogen, Perm". To provide conservatism the same values are applied for consumption of the heat for destruction of SF6.	For the reason of improvement of applicability. The values of heat consumption have already been found in the MR for HFC23 destruction project. Having been verified they immediately are valid for SF6 destruction process.

[13] The planned consumption norms of energy resources adopted at JSC "HaloPolymer Perm" is available on auditors' request
[14] The planned consumption norms of energy resources adopted at JSC "HaloPolymer Perm" is available on auditors' request

APPENDIX 3. LETTER OF APPROVAL

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of the Environment,
Transport, Energy and Communications DETEC

Federal Office for the Environment FOEN
Climate Divsion

FOEN, MOL, 3003 Berne

Vitol S.A.
tao Nikolas Doucakis
Boulevard du Pont d'Arve 28
1205 Geneva

Reference: J294-0485
Project reference: "SF6 destruction at JSC "HaloPolymer Perm""
Our reference: MOL
Contact person: MOL
Berne, April 27, 2012

Letter of approval for a project under article 6 of the Kyoto Protocol (JI)

The Federal Office for the Environment (FOEN), acting as the Swiss Designated Focal Point (DFP) confirms that Switzerland :

1. has ratified the Kyoto Protocol on July 09, 2003 ;
2. approves voluntary participation in the JI project activity mentioned above ;
3. by this letter of approval, also authorizes "Vitol S.A." to participate as project proponent to the JI project activity named above.

Signed on behalf of the Federal Office for the Environment FOEN

Yvan Keckeis
Senior Policy Officer

Annex: Legal information for Swiss JI project participants regarding business transactions abroad

Laurence Mortier
FOEN,3003 Berne, Switzerland
Telephone +41313241567, Telefax +41313230367
swissflex@bafu.admin.ch
http://www.environment-switzerland.ch

МИНИСТЕРСТВО ЭКОНОМИЧЕСКОГО РАЗВИТИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
(МИНЭКОНОМРАЗВИТИЯ РОССИИ)

ПРИКАЗ

16 марта 2012 г. **Москва** № 131

Об утверждении перечня проектов, осуществляемых в соответствии со статьей 6 Киотского протокола к Рамочной конвенции ООН об изменении климата

В соответствии с пунктом 13 Положения о реализации статьи 6 Киотского протокола к Рамочной конвенции ООН об изменении климата, утвержденного постановлением Правительства Российской Федерации от 15 сентября 2011 г. № 780 «О мерах по реализации статьи 6 Киотского протокола к Рамочной конвенции ООН об изменении климата» (Собрание законодательства Российской Федерации, 2011, № 39, ст. 5486), приказываю:

Утвердить прилагаемый перечень проектов, осуществляемых в соответствии со статьей 6 Киотского протокола к Рамочной конвенции ООН об изменении климата.

Министр Э.С. Набиуллина

Министерство экономического развития Российской Федерации
Департамент управления делами №3

Минэкономразвития России
Вн.№ 131
от 16.03.2012 1л.+1л.

УТВЕРЖДЕН
приказом Минэкономразвития России
от «16» 03. 2012 г. № 131

ПЕРЕЧЕНЬ

проектов, осуществляемых в соответствии со статьей 6 Киотского протокола к Рамочной конвенции ООН об изменении климата

1. Инвестиционный проект «Реализация комплекса энергосберегающих мероприятий на ОАО «Казаньоргсинтез» (инвестор проекта – ОАО «Казаньоргсинтез», иностранное уполномоченное лицо – «Газпром Маркетинг и Трейдинг Лимитед»).

2. Инвестиционный проект «Утилизация попутного нефтяного газа с Западно-Салымского и Нижне-Шапшинского месторождений, Ханты-Мансийский автономный округ - Югра, Россия» (инвестор проекта – ЗАО «ЮграГазПроцессинг», иностранное уполномоченное лицо – «Стичтинг Карбон Перчейзинг Интермедиари»).

3. Инвестиционный проект «Повышение энергоэффективности на ОАО «Металлургический завод им. А.К. Серова» компании УГМК» (инвестор проекта – ОАО «Металлургический завод им. А.К. Серова», иностранное уполномоченное лицо – «Витол С.А.»).

4. Инвестиционный проект «Утилизация гексафторида серы на предприятии ОАО «ГалоПолимер Пермь» (инвестор проекта – ОАО «ГалоПолимер Пермь», иностранное уполномоченное лицо – «Витол С.А.»).