



 Never Stop Improving

Real cases eradication ASF in Russia

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Bangkok
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Contents

ASF in Russia

Some real eradication Case

- Small village (back yard)
- Small farm
- Modern pig farm

Main stages of eradication

Massage to home

Россельхознадзор / Эпизоотическая ситуация / АЧС

АФРИКАНСКАЯ ЧУМА СВИНЕЙ

КАРАНТИН

Хронология Противодействие Публикации Доклады Фотографии Нормативное регулирование

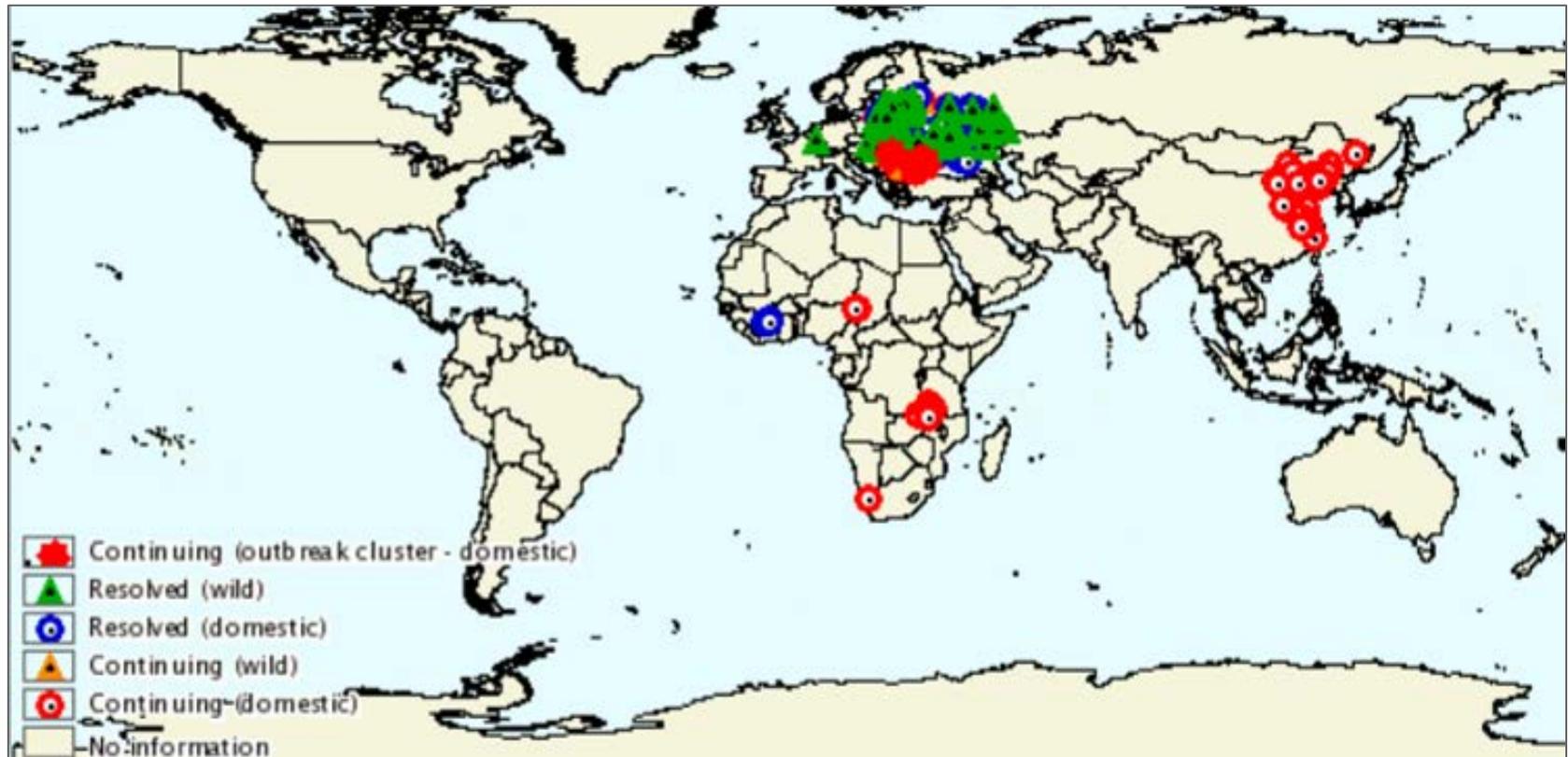
Активные вспышки: **2**

Вспышки за 2019 год: **2**

Вспышки за 2007-2019гг.: **1388**

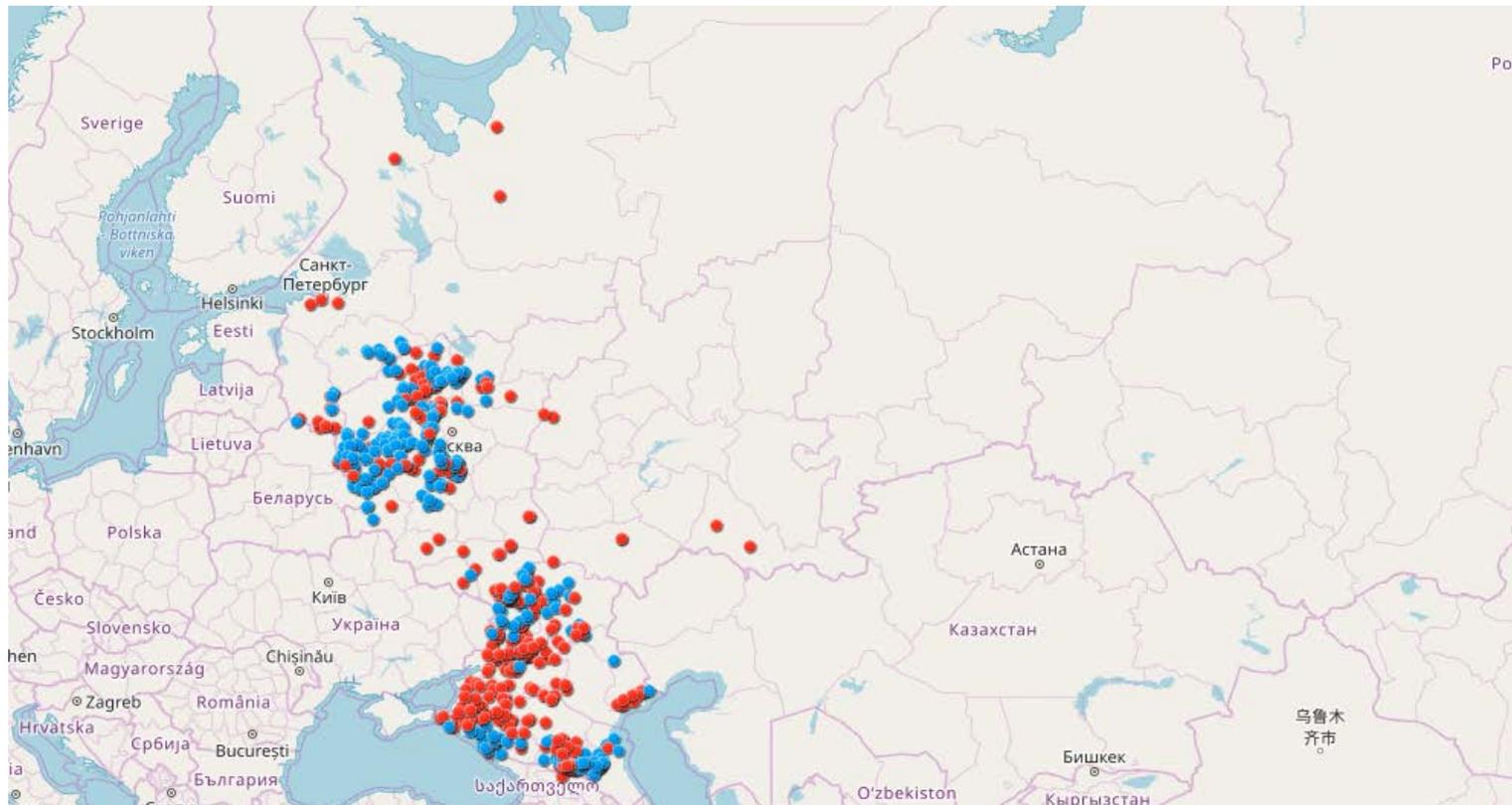
African Swine Fever in the World

2007-2018



ASF in Russia

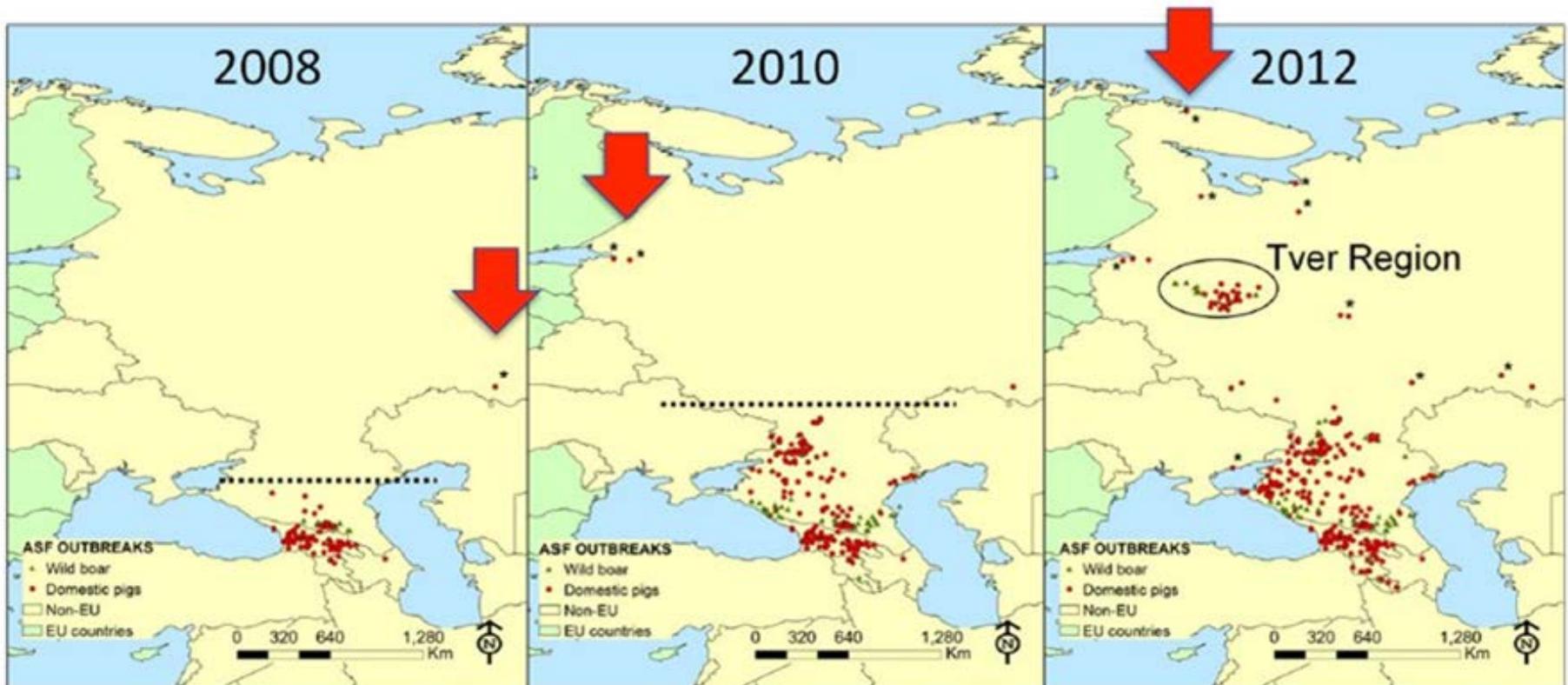
2007-2014



<https://arriah.maps.arcgis.com/apps/View/index.html?appid=ef883c6fa804fc39bfe4487203eb3cb&extent=-10.4262,27.7614,158.3238,73.8248>

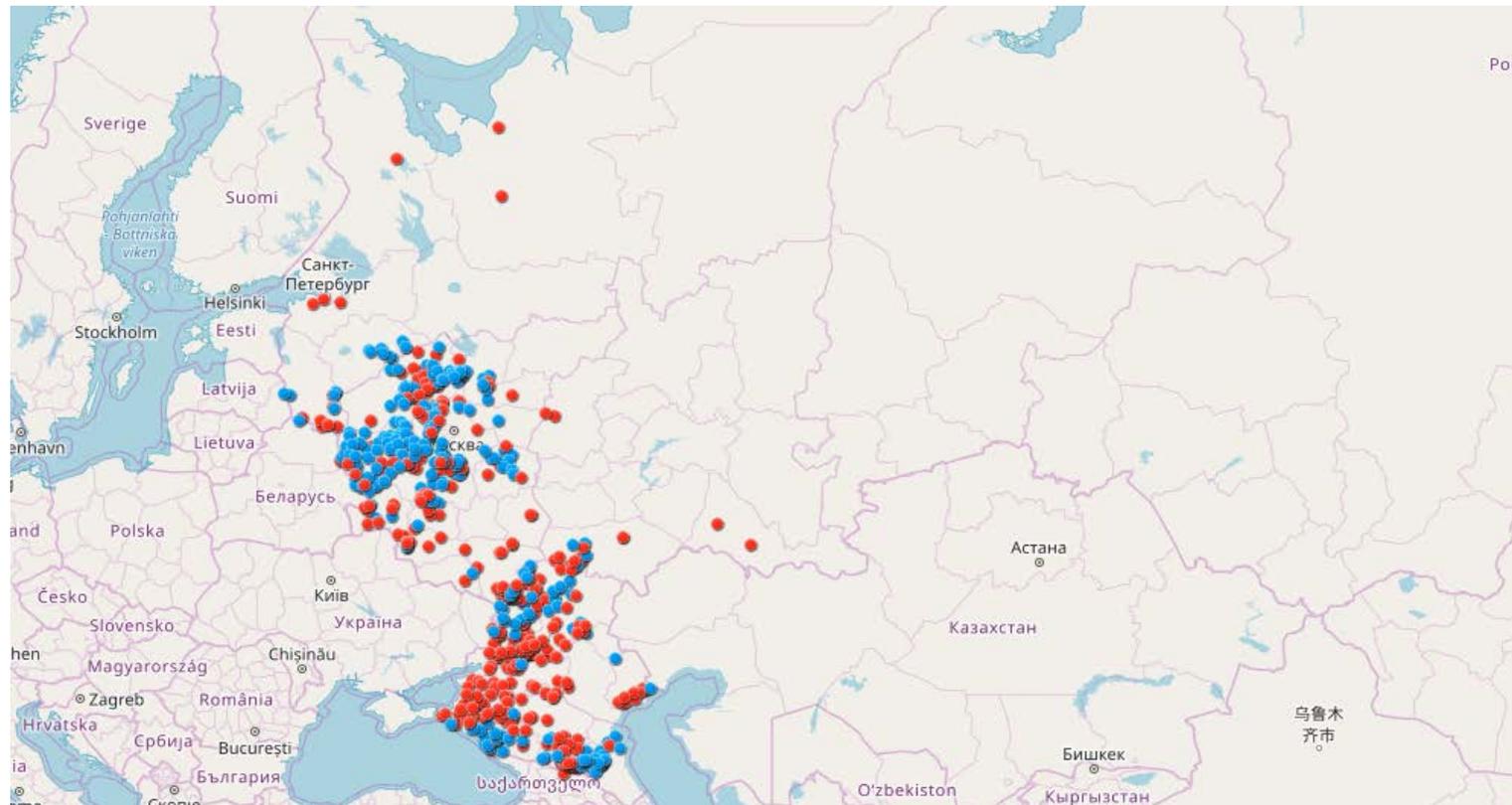
ASF in Russia

2007-2014



ASF in Russia

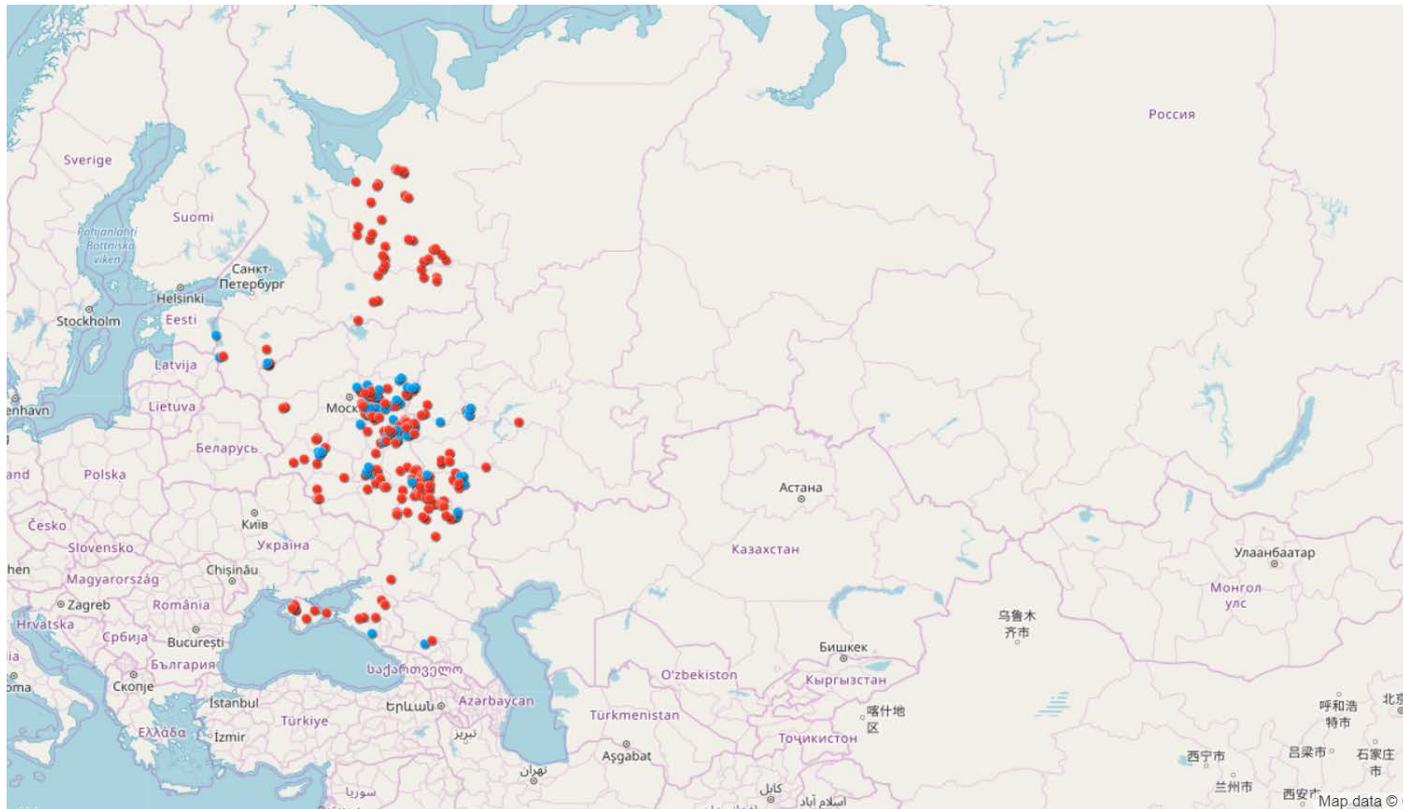
2007-2015



<https://arriah.maps.arcgis.com/apps/View/index.html?appid=ef883c6fa804fc39bfe4487203eb3cb&extent=-10.4262,27.7614,158.3238,73.8248>

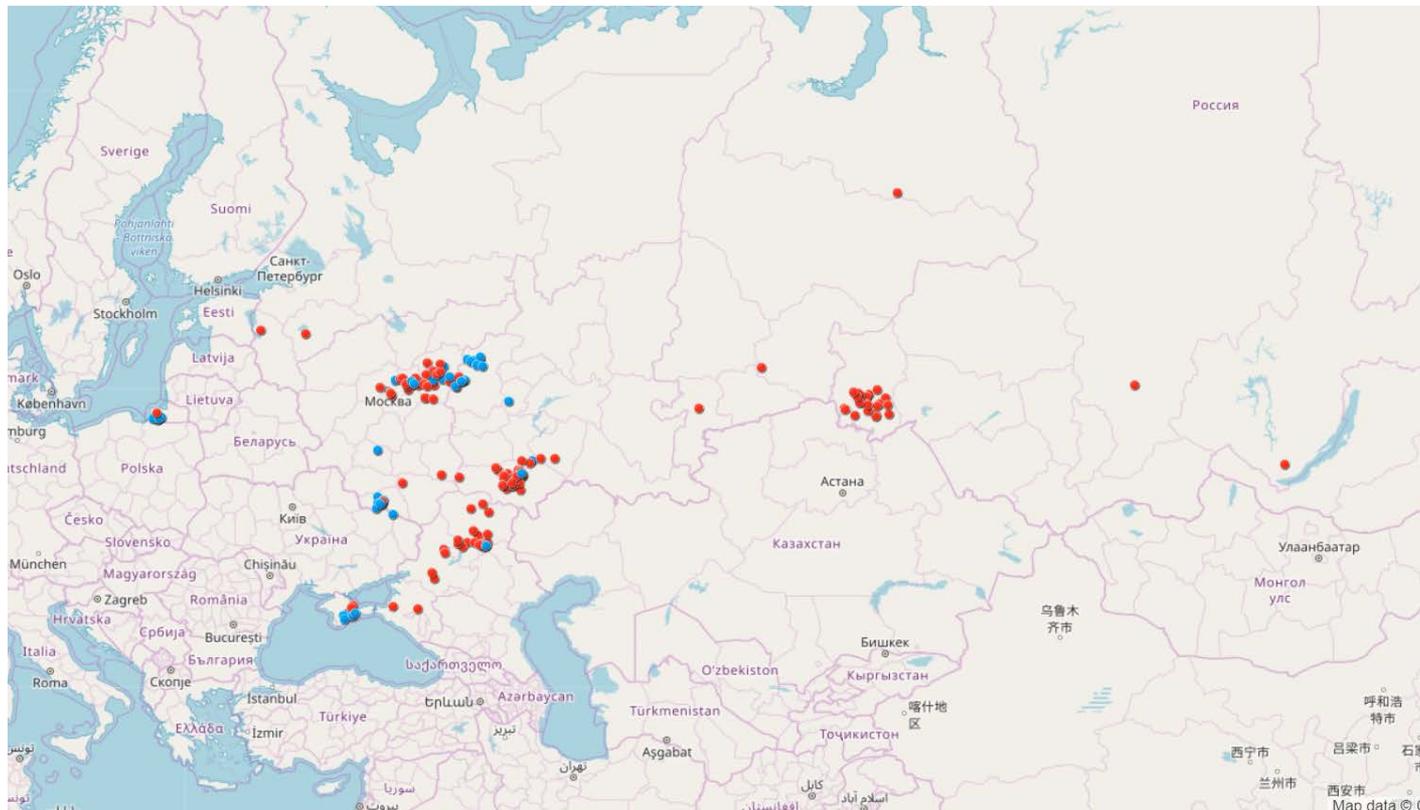
ASF in Russia

2016



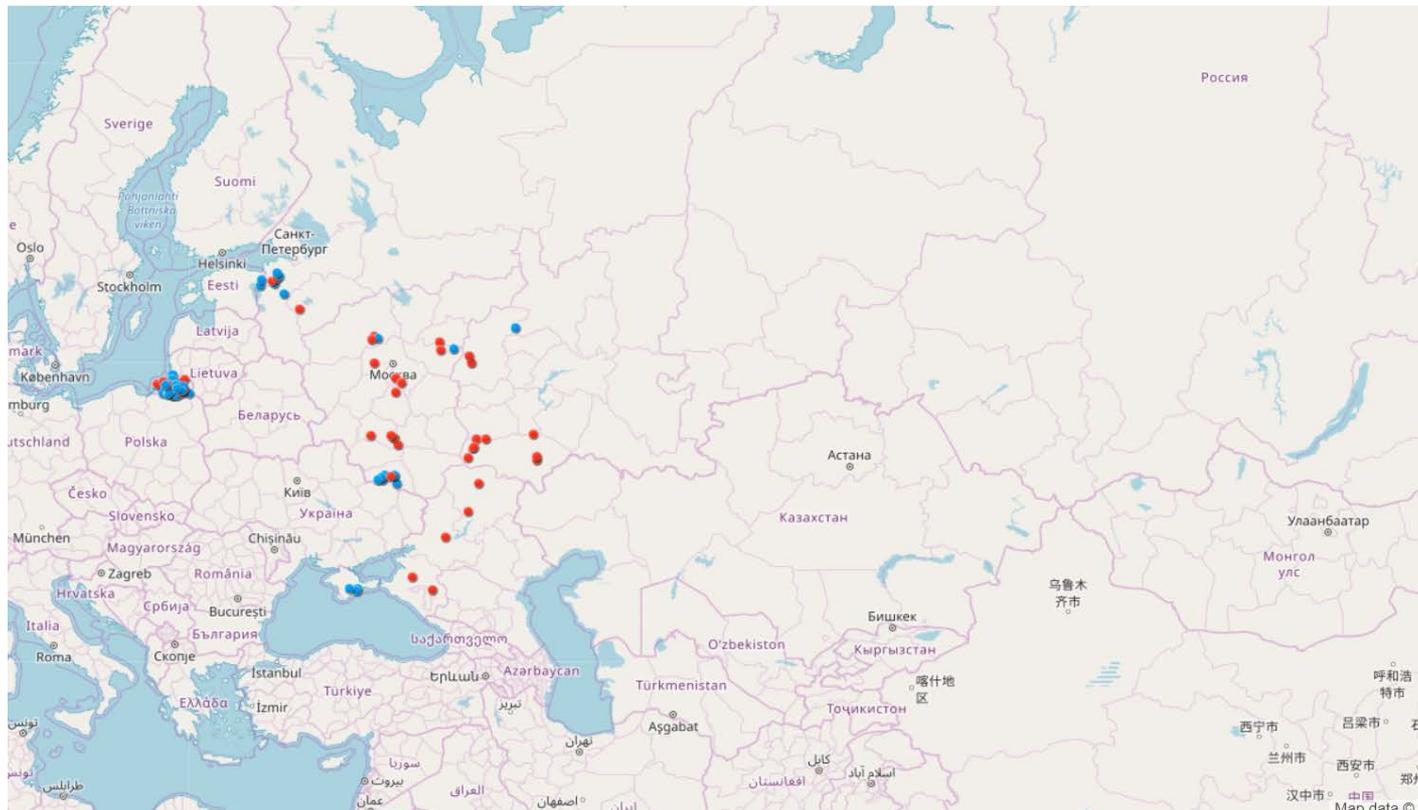
ASF in Russia

2017



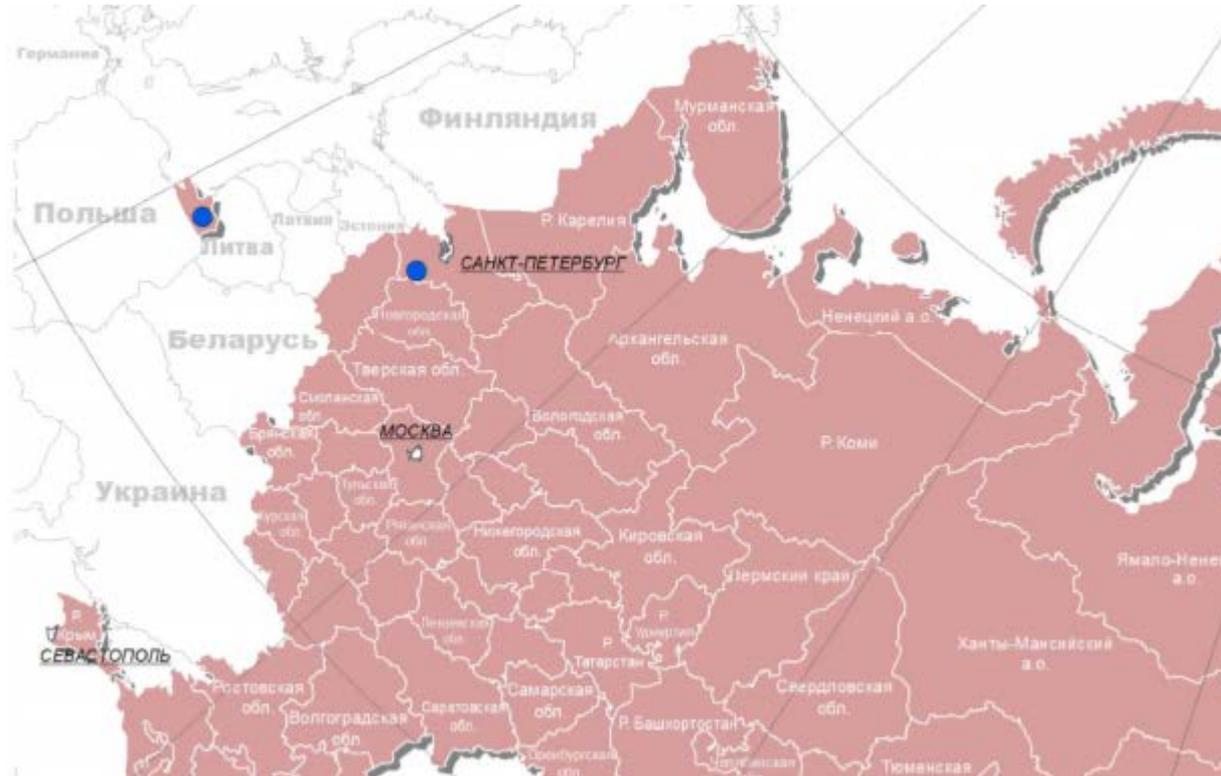
ASF in Russia

2018



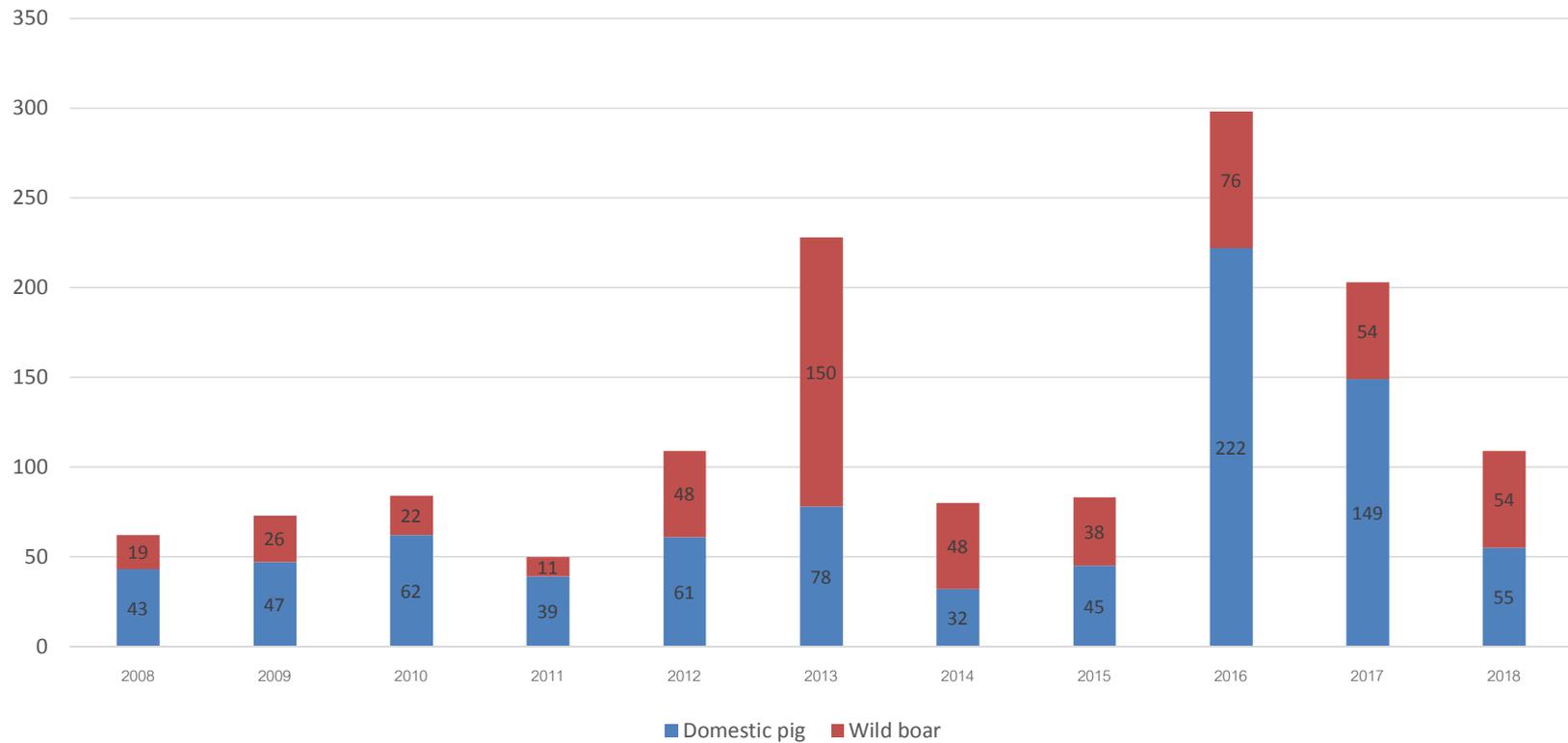
ASF in Russia Today

2019



ASF in Russia

2008-2019



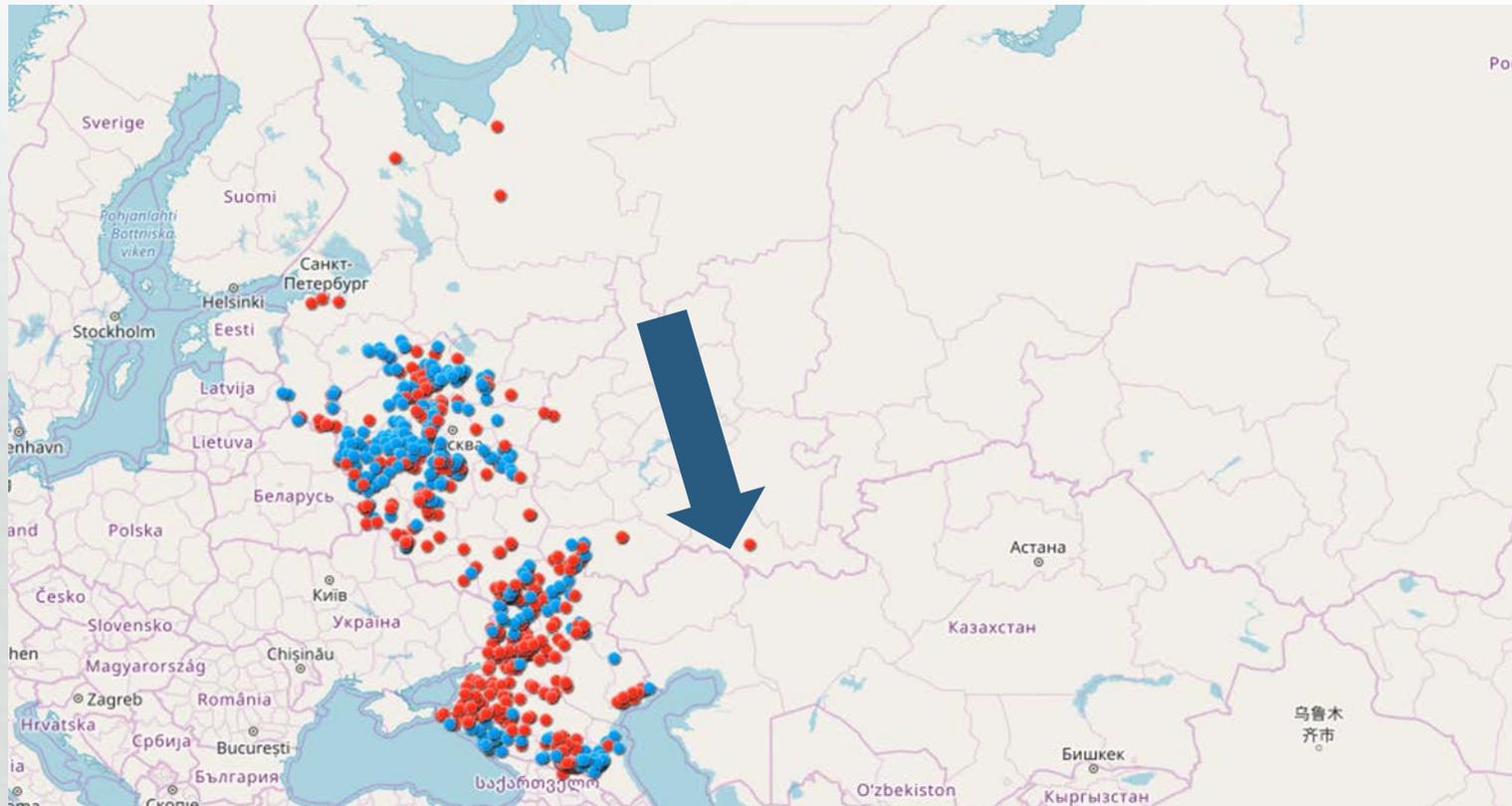


ASF Stamping OUT program

Case 1

Successful

Oremburg, Russia



Village Chernorechie , Orenburg region

24.07.2008



Backyard

Msr Osaypin found first dead pigs 22.07.2008



Different services act in outbreak

Government vet, Police, The main head or region



Sing ASF quarantine in all road close to the farm

24.07.2008



Do special control point for all transport at entrance to the village and outbreak area

24.07.2008



Do barrier around outbreak area

Close all road to farm



Training for village people. Tell them that is it ASF and that we need to do in quarantine area

24.07.2008



Backyard Msr Osaypin

There was fair all wooded and all organic



All pigs (127) in the village was bayed by government and euthanatized

25-26.07.2008



Dead pigs was put to deep pit and use lime for disinfection

25.07.2008



Cut stomach before burn

26.07.2008



Disinfection backyard facility

25.07.2008



Take out all manure from all villages backyard

26-28.08.2008



Daily disinfection of intra - village roads, Calcium hypochlorite solution 1 L - for 1 m²

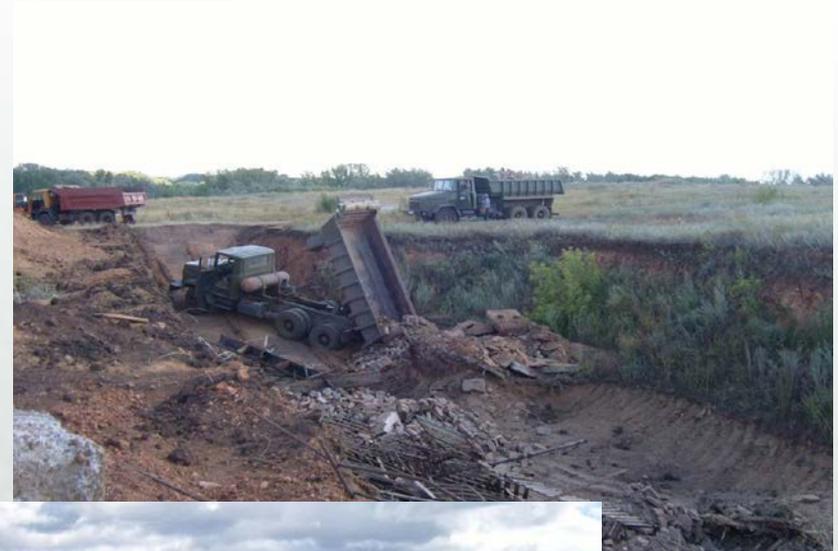


Burning farm (53 pigs) close village



Cleaning of farm walls and removal of soil in the farm

3-10.07.2008



Final disinfection 14-16.08.2008

2 kg lime per 1 square meter, and later water 10 l per 1 square meter



Final disinfection 14-16.08.2008

2 kg lime per 1 square meter, and later water 10 l per 1 square meter



Disinfection point at region border

Kazakhstan border

Since 31.08.2018



Disinfection point at region border

Kazakhstan border

Since 31.08.2018



Control in airport

Since 31.08.2018





ASF Stamping OUT program

Case 2

Small pig farm

Clinical sing in finisher room



Start euthanasia pigs

In infected room



Pigs are going to truck

13.08.2012



Euthanasia pigs

Poison injection in truck



Euthanasia pigs

Poison injection in truck



Preparation of a pit for burring

10.08.2012



Delivery dead pigs



Cut stomach before burn



Preparation of pigs for incineration



Preparation of pigs for incineration

Lime disinfection



25.08.2018



Detect and sing outbreak



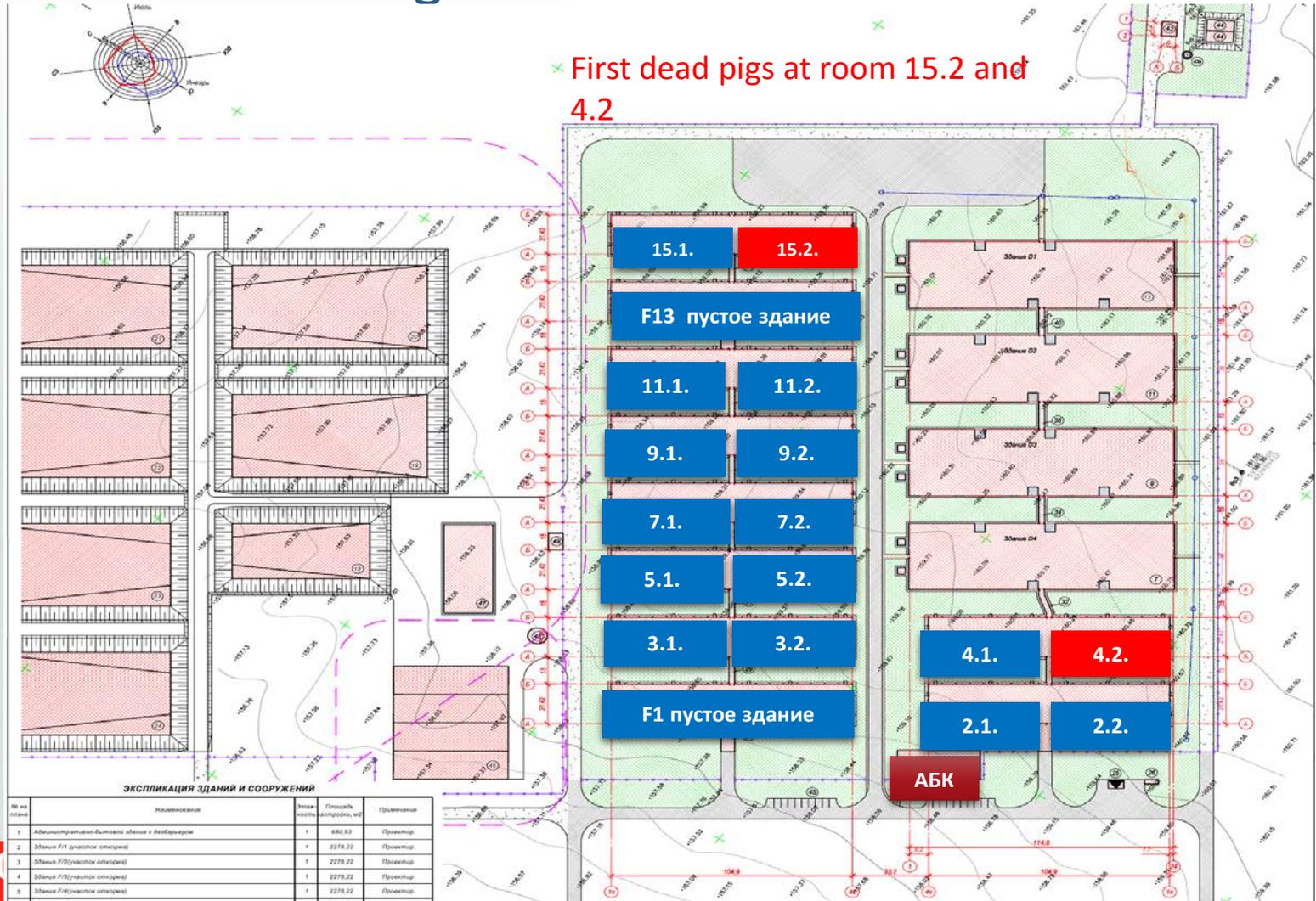


ASF Stamping OUT program

Case 3

New modern farm

Outbreak at 22 august 2016



21-23.08.2016



21-23.08.2016



First dead pigs were are burn as follows

24.08-04.09.2016



Burn first dead pigs

24.08-04.09.2016



After every delivery dead pigs to burn point all transport was disinfect

24.08-04.09.2016



Start use lime for all road around farm

From 25.08.2016



Start to build loading ramp at room 15/2 and 4/2

25.05.2016



Start to do photo all dead pigs

27.08.2016



Start to do photo all dead pigs

27.08.2016



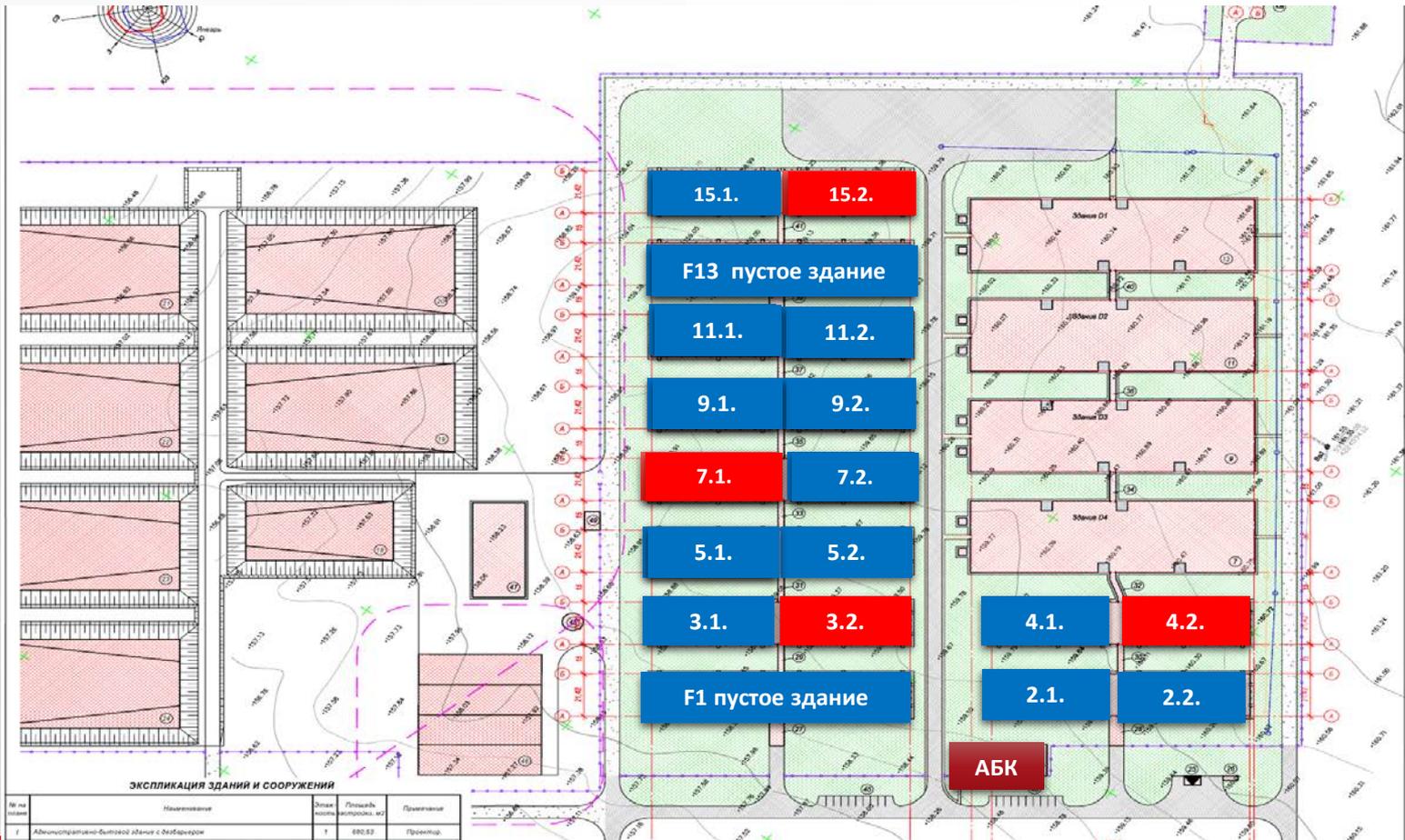
Dead pigs at room 3/2

29/08/2016



Some dead pigs in room 7/1

30/08/2016



01/09/2016 new dead pigs at room 7/1, 7/2, 5/1, 3/1



Build loading rump at room 5

3.09.2016



Killing pigs with injection poison (bloodless method)

06-08.09.2016



Loading dead pigs into truck

06-08.09.2016



Put dead pigs at burn pit

06-08.09.2016



There are one from 4 pit

6-8.09.2016



Put lime to empty room

From 06/09/2016



09.09.2016



ASF Timing

During 15 days - conformation ASF outbreak

22/08-05/09/2016

Dead 616 pigs

During 3 days – Stamping Out

06-08/09/2016

ethanized 17121 pigs

Staff leave outbreak

After 09.09.2016



Start use hot mist machine for office and shower room

From 10.09.2016



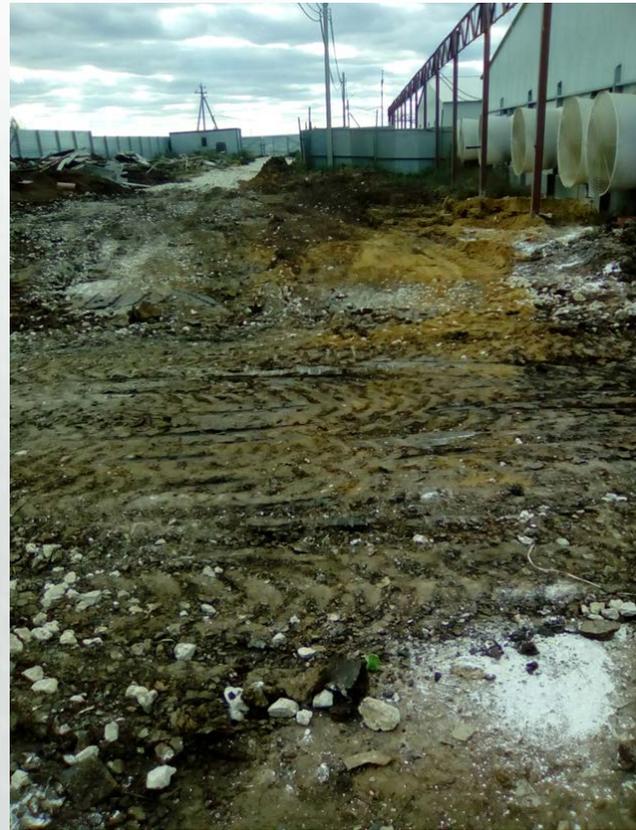
Start use hot mist machine for office and shower room

From 10.09.2016



Take out ground that are contact with dead pigs

12-13.09.2016



Take out ground that are contact with dead pigs

12-13.09.2016



Put lime to manure lagoon

13.09.2016



Burn all temporary beds, clothes used in the elimination work

13.09.2016



Burn all temporary beds, clothes used in the elimination work

13.09.2016



Put Lime to place with burn pit, build fence around burn place

5-1.10.2016



Put lime to all farm territory

18.10.2016



Put lime to all farm territory

18.10.2016



Start reaper work in all farm

19.10.2016



Start washing and disinfection at farm

25.12.2016



There was introduce 3970 pigs for bioassay

12.02.2017



How much is it cost

Estimated cost of an ASF eradication program 20 000 finisher site

	Thousands of Dollars
Payment for people work	86,9
Material for burn	92,3
Transport	31,2
Veterinary cost	173,8
Payment for pigs in back yard in 1 zone outbreak	81,5
Liquidation activities	465,8
Cost of euthanized pig	1607,7
Total cost eradication	2073,5
Repair cost	601,4
Final COST	2674,9
Insurance	1275,4
Total loss	1399,5

A person wearing a blue work jacket is holding a small, light-colored piglet. The background is a bright, slightly blurred indoor setting.

 Never Stop Improving

ASF Stamping-Out in Modern Farm

Main stages

Rules of 21.05.2016 No. 213 On the approval of veterinary rules for the implementation of preventive, diagnostic, restrictive and other measures, the establishment and abolition of quarantine and other restrictions aimed at preventing the spread and elimination of ASF

New low

❖ **Preventive actions** (comply with veterinary regulations, prevent pollution, provide pigs for inspection, inform about the case, isolation of corpses)

❖ **Activities for suspected ASF** (report the disease of pigs (24 hours), assist in carrying out activities, isolate suspects in the disease)

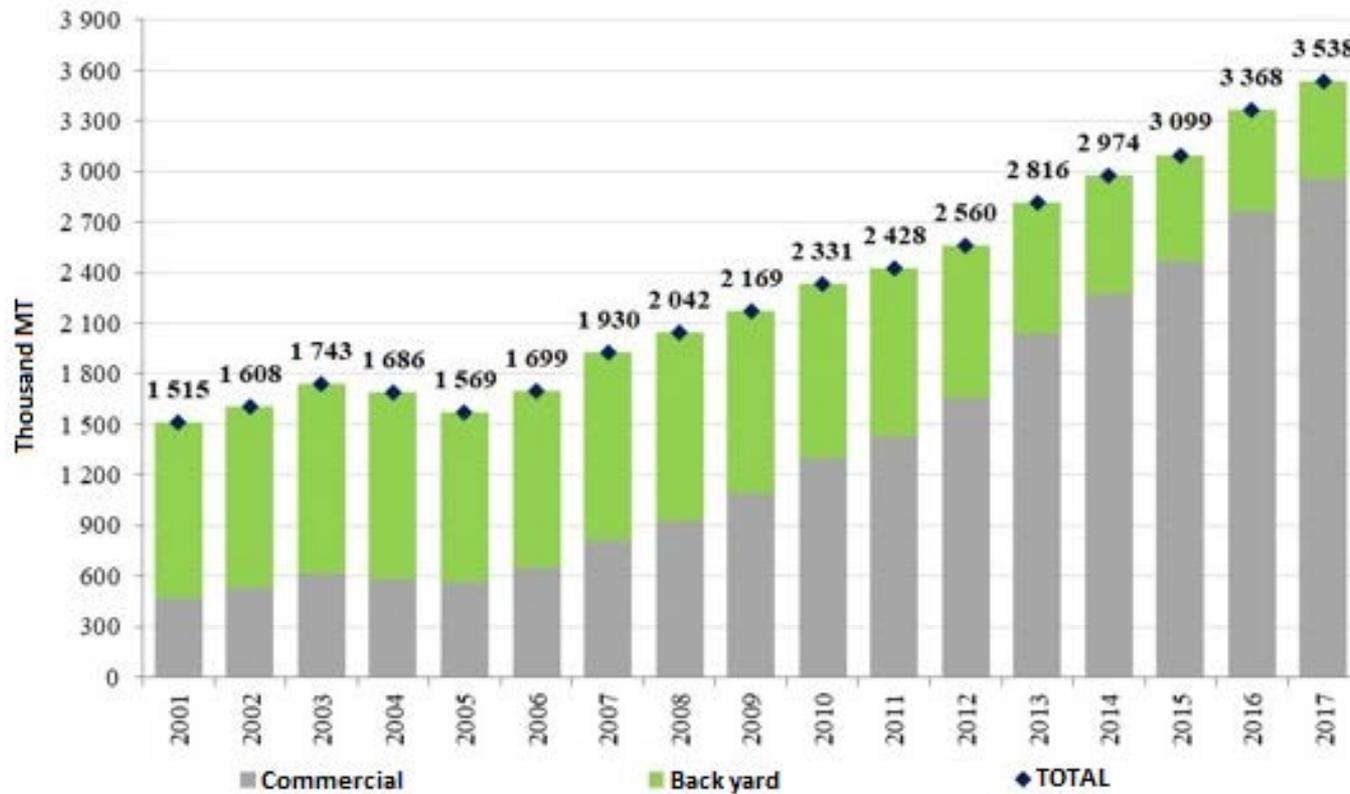
❖ **Diagnosis** (sampling for diagnostic studies should be carried out in accordance with clause 16.1 of part 5)

Establishment of quarantine, restrictive and other measures aimed at eliminating ASF, as well as preventing the spread of ASF (to do plan eradication)

❖ **Cancel quarantine and subsequent restrictions**

Pork Production in Russia

2001-2017 (Dead Weight)



ASF at the modern farm

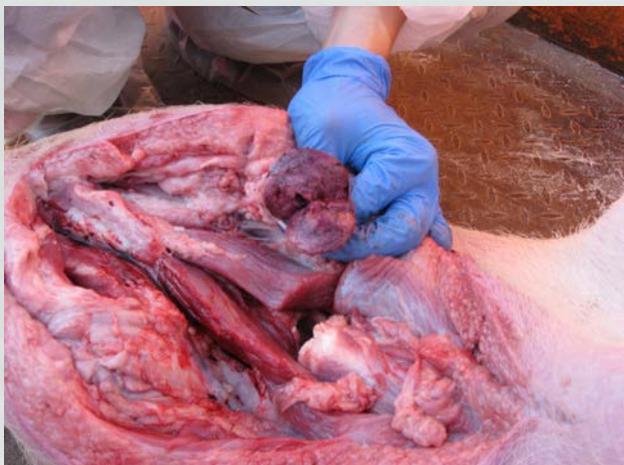
Data	Region	Name farm	Number pig
07/ 2012	Krasnadar		16600
06/ 2013	Tver		4500+35000
07/ 2014	Pskov		23 000
12/ 2014	Orel		26 000
12/ 2014	Voronezh		8 000
09/ 2016	lipezk		16 000
08/ 2017	Krasnodar		4 500
09/ 2017	Belgorod		17 000
07/ 2018	Novgorod		46 000
07/2018	Belgorod		12 500
07/ 2018	Kaliningrad		100 000
09/ 2018	Lipeck		4 000

Main Stage ASF Stamping Out Program

- Early detection (clinical sing, sampling and sent to lab)
- Stop any pig movement and staff movement in farm
- Laboratory result
- Conformation laboratory result
- Plan ASF eradication
- Preparation work
- Euthanasia all pig
- Burning dead and burying
- Cleaning and disinfection
- Bioassay
- Final disinfection

Early detection

Main Stage ASF Stamping Out Program



Early detection – Sampling

Main Stage ASF Stamping Out Program



Stop any pig movement and staff movement in farm

Main Stage ASF Stamping Out Program

Stop pigs

Stop peoples

Stop transport



Laboratory result and Conformation laboratory result

Main Stage ASF Stamping Out Program

- PCR test in Local laboratory – 6-10 hours
- PCR test in Pokrov national lab for conformation

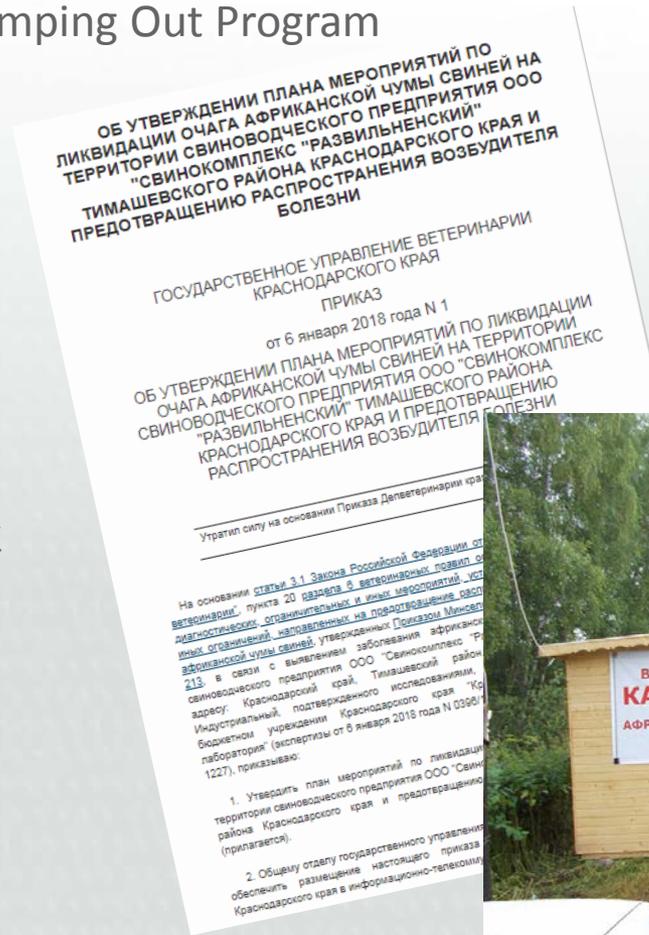
ASF QURANTINE



Plan ASF eradication And Preparation work

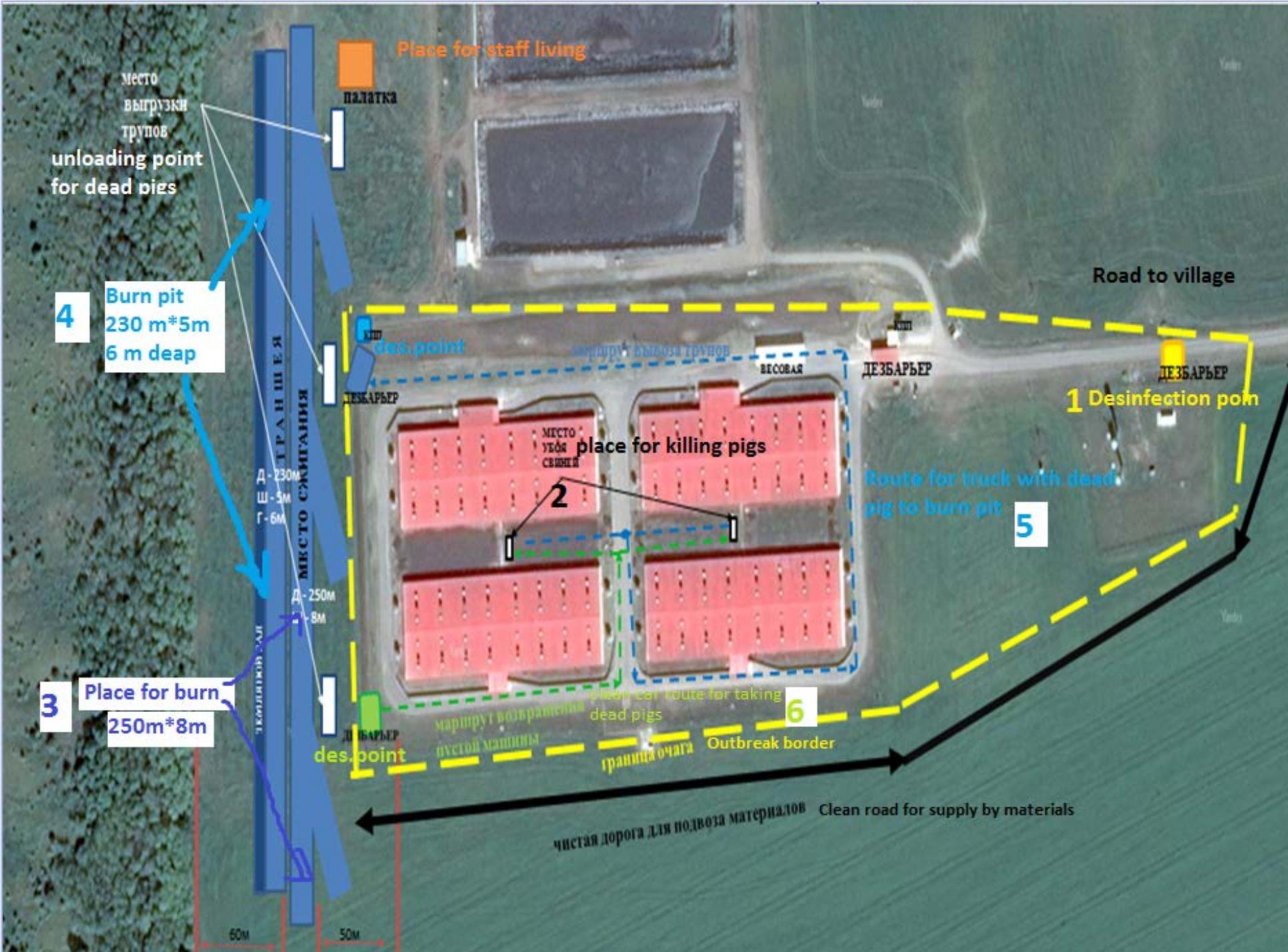
Main Stage ASF Stamping Out Program

- Quarantine
- Action Plane
- Terms of work
- Responsible



Algorithm for organizing elimination ASF

Farm territory 1 (Dirty ASF zone)	Place for burn pigs 2 (clean zone , outside farm)	3 Clean area
A) equipment for moving pigs length 2m, width 1m with ampoule storage for injection	A) strong line of clean and dirty area	A) posting on duty around outbreak all time
Б) make storage place outside farm close the door for transport for dead pigs	Б) delivery of flammable materials (tires, wood, diesel)	Б) to detect 1 (20 km) and 2 (100 km) ASF zone around outbreak
B) to do disinfection point at the enter to territory farm	B) collect the necessary equipment, machines and materials, and mark them only for work in the outbreak	B) work with people in villages close to farm
Г) to do weight point at the enter to territory farm	Г) digging holes and put the first layer of wheels and wood	Г) monitoring ASF at another farm close to outbreak
Д) to check and account all dead pigs leave farm	Д) installation of lighting, tents and other necessary equipment	Д) tracking and returning products shipped from an infected farm
E) installation of video cameras	E) installation of video cameras	E) another prevention events
Ж) Disinfection	Ж) after the end of all preparatory measures, the clean zone (place for burn pigs outside farm) is transferred to the dirty one; entry and exit of transport and personnel not participating in the liquidation is prohibited	Ж) paperwork
И) do point for keeping dead pigs before burn them (if it nessesary)	И) all staff who work during eradication remain the entire period in this zone - they leave only after the completion of the entire eradication process in the prepared "clean zone" in "clean clothes" transferred from outside the quarantine zone	
<p>K) the organization of food for persons participating in the elimination of the outbreak in the dirty zone is carried out in a disposable non-returnable container through the 1st des-barrier (sanitary inspection room). Delivery of food from the dezbarьер to the buildings on the trolley. Physical contact of people, materials, equipment in a clean area with a dirty one is excluded.</p>		



Place for staff living

палатка

место выгрузки трупов
unloading point for dead pigs

Road to village

4 Burn pit
230 m*5m
6 m deep

des. point

маршрут вывоза трупов

вЕСОВАЯ

ДЕЗБАРЬЕР

1 Desinfection point

ДЕЗБАРЬЕР

2 place for killing pigs

МЕСТО УБОЯ СВИНЕЙ

Route for truck with dead pig to burn pit

5

3 Place for burn
250m*8m

Д - 230м
Ш - 5м
Г - 6м

Д - 250м
Ш - 8м

МЕСТО СЖИГАНИЯ
ДЕЗБАРЬЕР
ДЕЗБАРЬЕР

Route for taking dead pigs

6

маршрут возврата пустой машины

граница очага

Outbreak border

чистая дорога для подвоза материалов
Clean road for supply by materials

60м

50м

1. Disinfection point at the enter at outbreak

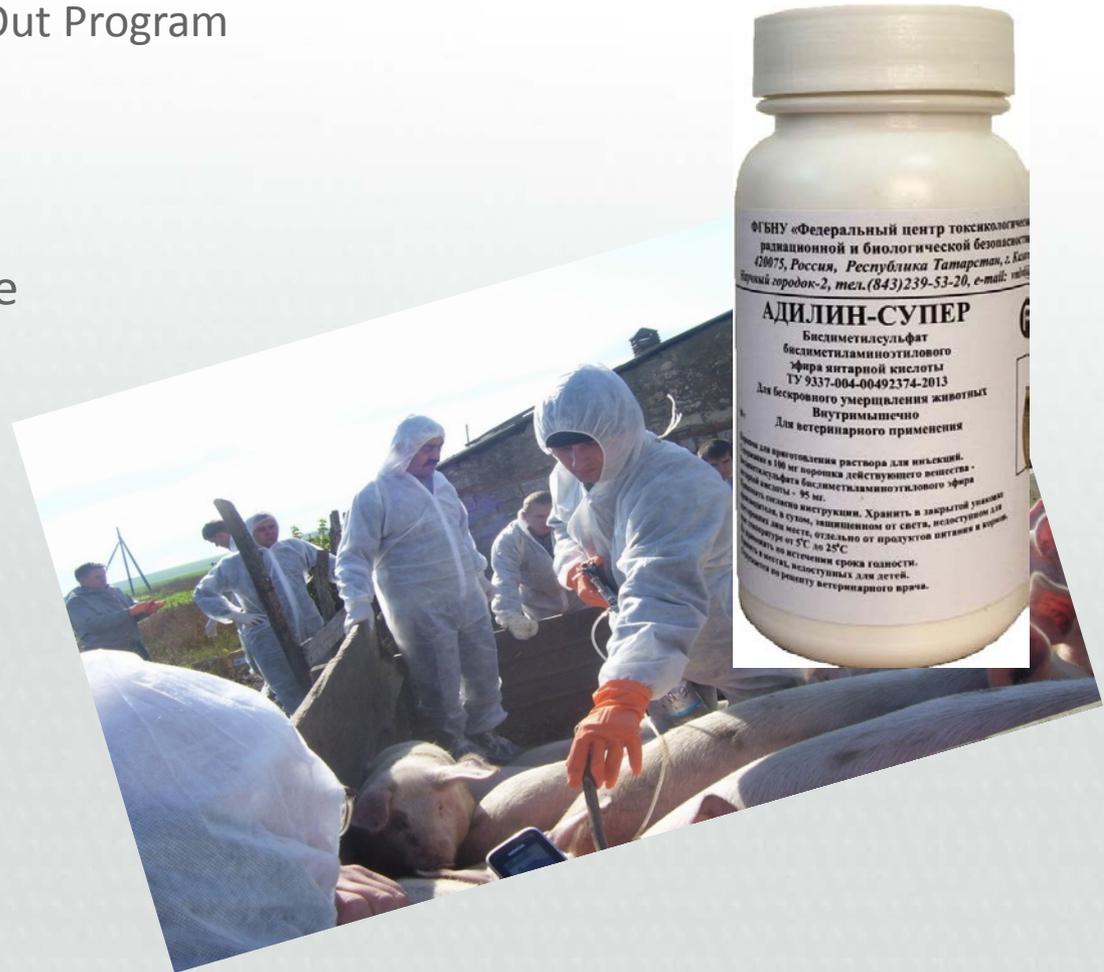
Main Stage ASF Stamping Out Program



Euthanasia all pig

Main Stage ASF Stamping Out Program

- Place for Euthanasia
- bloodless method
- poison paralyzing the respiratory system
- safety for personnel



2. Place for Euthanasia pigs

Main Stage ASF Stamping Out Program



2. Place for Euthanasia pigs

Main Stage ASF Stamping Out Program

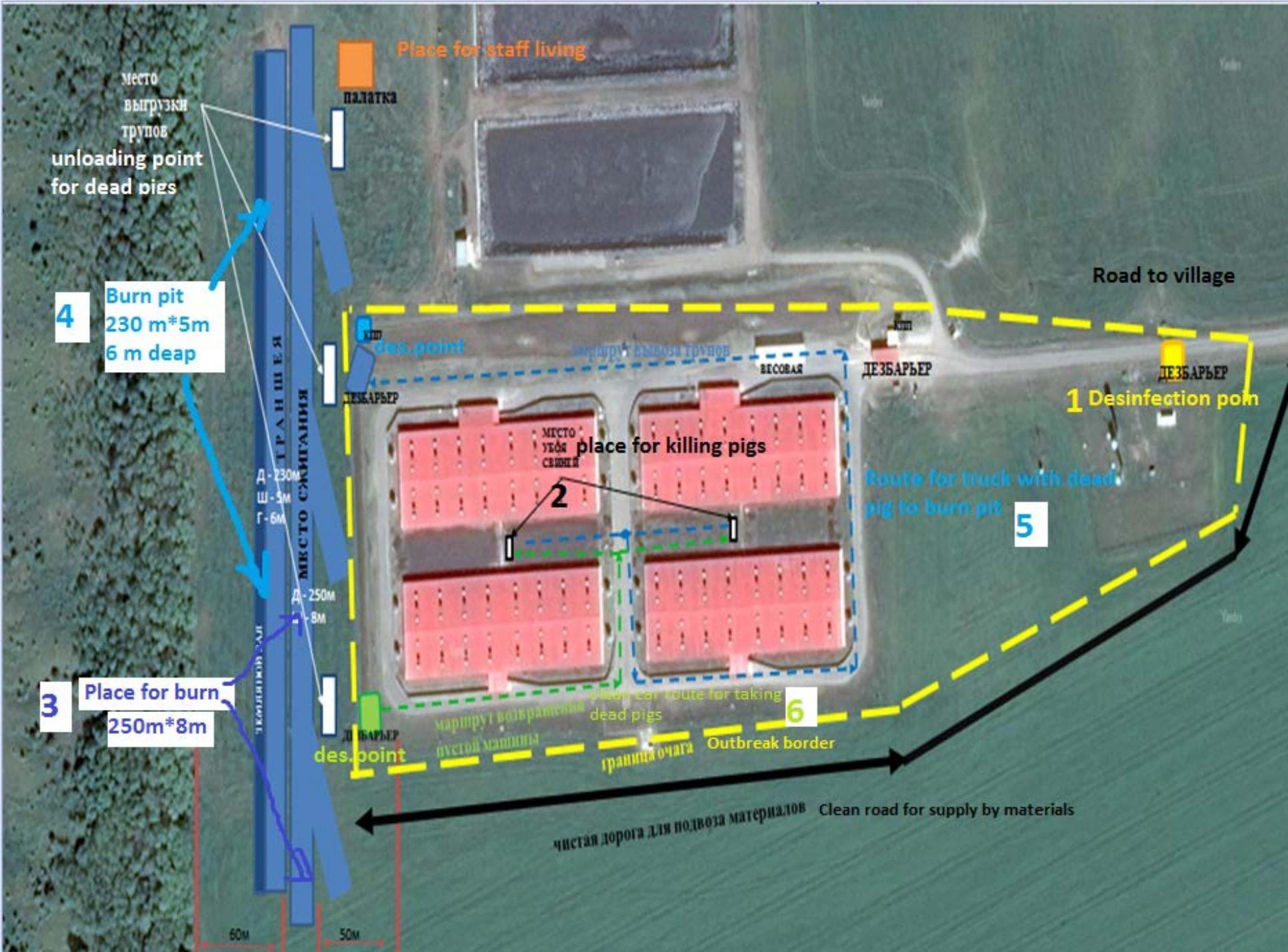


Burning dead and burying

Main Stage ASF Stamping Out Program

- Close to farm
- As much as necessary
- Short transport way





Place for staff living

палатка

место выгрузки трупов
unloading point for dead pigs

4 Burn pit
230 m*5m
6 m deep

des. point

маршрут вывоза трупов

Road to village

1 Desinfection point

place for killing pigs

Route for truck with dead pig to burn pit

5

3 Place for burn
250m*8m

МЕСТО СЖИГАНИЯ
Д - 230м
Ш - 5м
Г - 6м
Д - 250м
Ш - 8м

2

МЕСТО УБОЯ СВИНЕЙ

маршрут вывоза трупов
Route for taking dead pigs

6

des. point

маршрут возврата пустой машины

граница очага

Outbreak border

чистая дорога для подвоза материалов
Clean road for supply by materials

60m

50m

3. Place for burn dead pigs 250*8m

Main Stage ASF Stamping Out Program



3. Place for burn dead pigs 250*8m

Main Stage ASF Stamping Out Program



3. Place for burn dead pigs 250*8m

Main Stage ASF Stamping Out Program



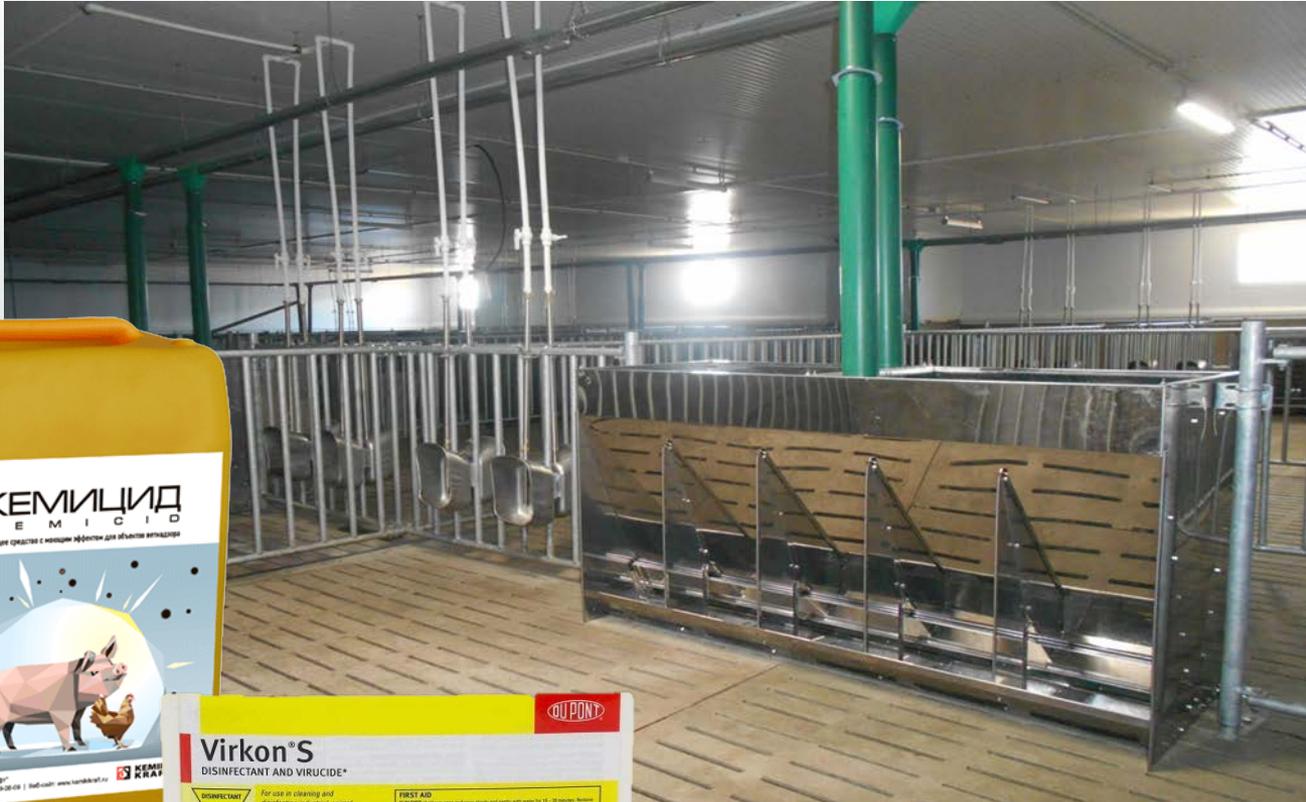
4. Pit for disposal of residues after burning dead pigs

230*6 m and Deep 6m



Cleaning and disinfection

Main Stage ASF Stamping Out Program



PIC

5 and 6 Disinfection Road using for transport dead pigs to burn place

Main Stage ASF Stamping Out Program



5 and 6 Disinfection Road using for transport dead pigs to burn place

Main Stage ASF Stamping Out Program



Put lime to burn place

Main Stage ASF Stamping Out Program



Put lime to manure lagoon

Main Stage ASF Stamping Out Program



Bioassay 8 month later

Main Stage ASF Stamping Out Program



Final disinfection

Main Stage ASF Stamping Out Program



Start Again

Conclusions: Stamping OUT

Main Stage ASF Stamping Out Program

Detect ASF outbreak (48 hours)

Official Government Quarantine 30 days, signed by the head of the region

Preparation

Start euthanasia of pigs and transfer to the burial site for incineration

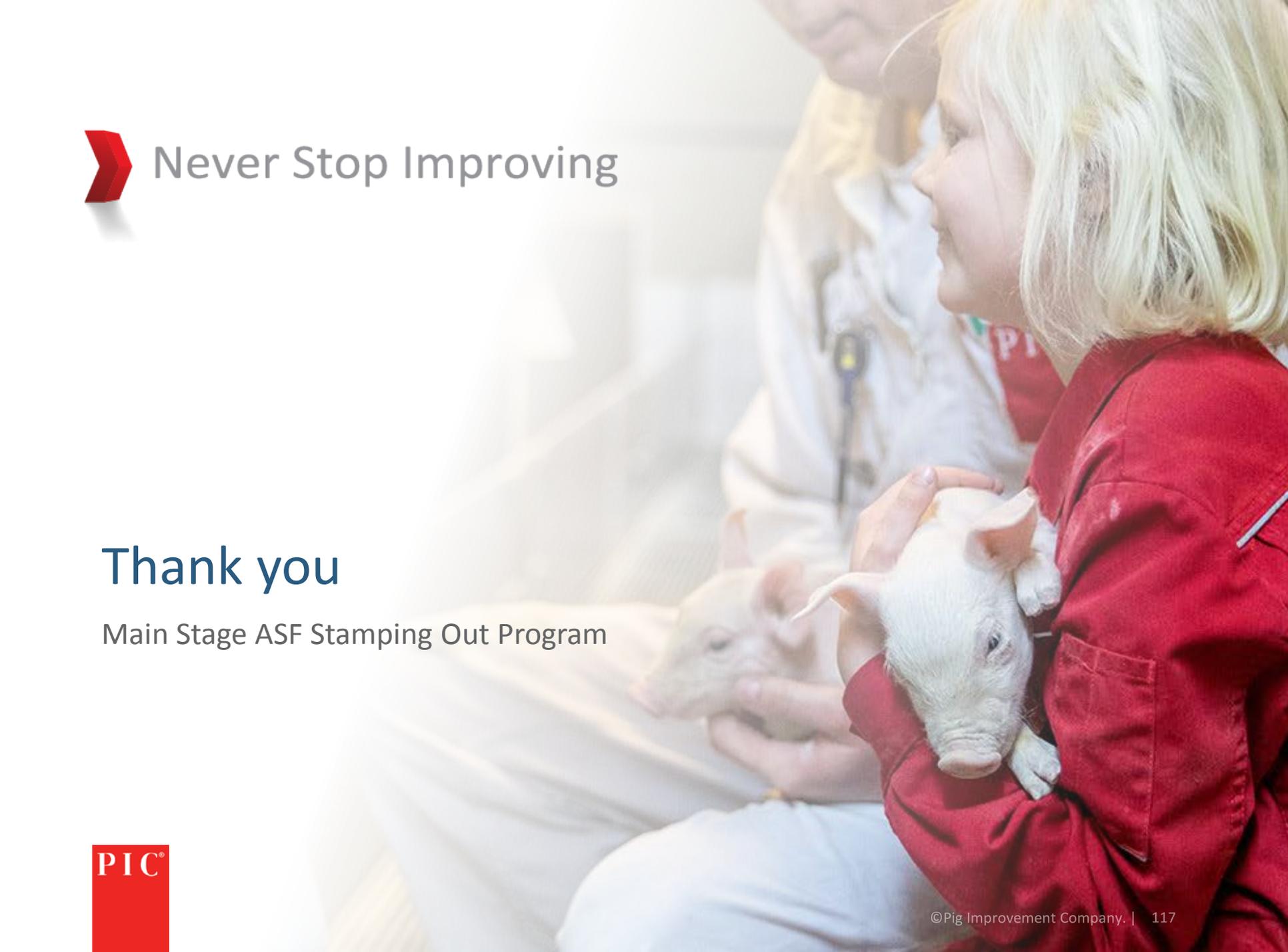
Disinfection all farm, around, road.

Quarantine 30 days

8 months before the first bioassay on the farm

2 bioassay and final disinfection

You can start farming AGAIN



 Never Stop Improving

Thank you

Main Stage ASF Stamping Out Program

PIC[®]