


5 Urban Air Pollution and Environmental Engagement in the Russian Far East: Developments from Late Soviet to Post-Soviet Times (1970s–2010s)

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Abstract Though the density of cars was still considerably smaller than today and than in most Western countries at that time, urban air pollution caused by cars was, in the late Soviet Union, already considered to be a serious environmental problem and health risk. This chapter sets out to demonstrate how environmental activists from the semi-state All Russian Society for Nature Protection together with various functionaries tried to tackle the problem in Far Eastern Primorskii Krai, notably via the yearly Operations Clean Air that were organised from the early 1980s throughout the Soviet Union. It then shows how the massive influx of Japanese second-hand cars completely altered the situation from the early 1990s. Due to its Asia-Pacific location, Primorskii Krai has become the region with the highest density of cars in Russia, with environmental concerns relegated to the backseat and air pollution growing worse despite reduced emissions per car. However, it is also this Asia-Pacific context that has given the region the chance to become a frontrunner in hybrid and electric car transport within Russia in recent years.

5.1 Introduction

In recent years, Soviet and Russian environmental history writing has vastly developed.¹ However, despite an impressive and rising number of insightful studies on a wide array of topics, many questions still remain, at best, partly

1 It would be impossible to do justice to this historiography in one footnote. The works by Arndt and Coumel, Breyfogle, Bruno, Brain, Bekasova, Doose, Josephson, Moon,

answered: to what extent did the 1970s witness an “environmental turn” in the Soviet Union, as has been asserted by several historians for Western countries?² To what extent have new environmental policies and legislation in Moscow been followed by practical steps on the ground? What has been the place of environmentalism in this regard, and how did it develop in the very last years of the Soviet Union and beyond?³ These are big questions that cannot be answered with the help of one single case study. However, it is regional case studies that are needed if we want to arrive at a better understanding of late Soviet and post-Soviet environmentalism and environmental policies.⁴

The present chapter traces in its first part the remarkable story of approaches to reducing car emissions in towns in late Soviet (Far Eastern) Primorskii Krai, starting from the late 1970s. In the second part, developments in post-Soviet times are dealt with. As will become clear, the story of the first part is to be seen in the context of a new Soviet-wide environmental legislation and agenda, albeit with peculiarities due to the engagement of regional actors. By contrast, the story of the second part is closely related to the peculiar Asia-Pacific context of the Russian Far East, which was able to become influential once the formerly closed system was replaced by an open market economy.⁵

Earlier literature has stressed the devastating environmental record of the Soviet Union and a Soviet ideology conducive to this, propagating nature’s domination by mankind.⁶ While there is an undeniable truth in both assertions, on closer examination, it becomes obvious that Soviet decision-makers were aware of many environmental problems and tried to tackle them in a systematic way, starting at the latest in the second half of the 1970s.⁷ Thus,

Obertreis, and (Maya) Peterson cited in this chapter show exemplarily how vibrant the field has become while constituting only a small part of recent publications worth mentioning.

2 See Obertreis, “Naturbeherrschung,” 119. For the ecological turn (or “revolution”) in the West and Japan, see, e.g. Radkau, *Ära*, 124–164.

3 Some important insights on these questions can be found already notably in Coumel, “Student Corporatism” as well as in Henry, *Red to Green*.

4 For a similar plaidoyer and a number of important steps in this direction, see Arndt and Coumel, “A Green End.”

5 Minakir, “Russian Far East.”

6 Peterson, *Troubled Lands*; Feshbach and Murray, *Ecocide*; Gestwa, *Großbauten*.

7 It should be noted that, in recent years, an increasing number of authors have already insisted on a revision of the purely—and exceptionally—negative picture of the Soviet Union’s relation with the environment and called for a contextualisation of the latter. See e.g. Brain, “Environmental History”; Moon, “Curious Case.”

the new Soviet constitution of 1977 contained (for the first time) a number of provisions that stipulated measures to protect and enhance the environment “in the interest of the current and of future generations” as well as the duty of various authorities and of the citizens themselves to act towards this end.⁸ Concerning the topic of air pollution, which was arguably one of the most urgent ones for many Soviet citizens and will play a prominent role in the present chapter, barely three years after the abovementioned new constitution took effect, an all-Soviet law for the protection of clean air was passed, followed two years later by a Russian one.⁹ The question is, of course, to what extent these laws were followed by practical steps to reduce air pollution. The present chapter contributes to the answering of this question.

Within the growing field of Soviet/Russian environmental history, it can also contribute insights into several aspects largely neglected in the last two decades. In recent years, we have come to gain valuable knowledge about Soviet dealings with water management, irrigation and draughts, fishing, and soils as well as societal and environmentalist responses to big infrastructural projects and to environmental disasters—both natural and man-made.¹⁰ By contrast, the handling of air pollution in the Soviet Union has been mostly neglected by recent research efforts,¹¹ and while much of the research on regional aspects of Soviet environmental history has focused on Russia’s Northwest, the Caucasus, and Central Asia,¹² so far the Far East has not been at the centre of attention, at least for the late Soviet period. In both regards, the present chapter can help to enlarge our picture of environmental developments and societal responses in the late Soviet and post-Soviet periods. As will be seen

8 See Art. 18, 42, 67 and 147 of the Soviet constitution of 1977 (passed on 7 October 1977).

9 See the Zakon SSSR ot 25.06.1980 “Ob okhrane atmosfernogo vozdukha” [Soviet Law for Air Protection] and the Zakon RSFSR ot 14.07.1982 “Ob okhrane atmosfernogo vozdukha” [RSFSR Law for Air Protection].

10 For important examples, see Gestwa, *Großbauten*; Obertreis, *Imperial Desert Dreams*; Peterson, *Pipe Dreams*; and the contributions in Breyfogle, *Eurasian Environments* as well as in the Forum “The Green End to the Red Empire,” 105–235.

11 Even in an important new publication on urban mobility in late-imperial Saint Petersburg and Soviet Leningrad, it does not play any role: Bekasova, Kulikova and Emanuel, “State Socialism.” As of late, the new EnviroHealth project led by Klaus Gestwa and Marc Elie (started in 2021) promises to shed more light on aspects of air pollution in the late Soviet Union.

12 See, e.g. Obertreis, *Imperial Desert Dreams*; Peterson, *Pipe Dreams*; most of the chapters in Breyfogle, *Eurasian Environments*; Bruno, *Nature*; Josephson, *Conquest*; Doose, *Tektonik*.

in the chapter, there are also particular reasons to pay special attention to the Far East regarding the topic of exhaust emissions: attempts to reduce these emissions in Primorskii Krai in the late 1970s preceded the nation-wide trend; after 1991, that region became the one with the highest density of cars; and in recent years, it has become a frontrunner in e-mobility in Russia.

The chapter will also contribute to shed light on a particular aspect of the aforementioned question about Soviet environmentalism: beyond informal environmentalist networks consisting of scientists, technocrats, and writers, and before the widespread and heterogeneous bottom-up environmentalist movement(s) coming into being in the wake of Chernobyl,¹³ was there an effective state-driven—or loyalist—environmental movement in the outgoing Soviet Union? While the existence and a considerable number of activities of the All-Russian Society of Nature Protection (VOOP—*Vserossiiskoe obshchestvo okhrany prirody*) as well as its nominal multi-million membership are well known from Douglas Weiner's seminal work and some other studies, the picture emerging from these studies depicts it from the 1970s either as dominated by functionaries without real interest in the environmental cause or as a group of "strawberry breeders" or "bird breeders," which, at best, "helped to spread information" on some environmental issues and to address "certain isolated problems."¹⁴ Coumel shows a different picture for the Nature Protection Brigade (at Moscow State University), a student VOOP organisation, underlining their vigilantist mode of operating as an auxiliary to the authorities. He makes clear, however, that before Perestroika, this was largely confined to fining "poachers" and refrained from taking action against economic lobbies, notably pollution.¹⁵ While these judgements and insights are doubtlessly grounded in sources and facts, it is again necessary to look at the regions in order to verify to what extent these judgements can be generalised.

The current chapter deals in the first instance with a specific case study from the Soviet Far East that can contribute to the answering of these questions. Behind this, last but not least, there is also the question of how regional and local actors in the Far East dealt with environmental laws and rules passed thousands of kilometres away in the political centre in Moscow, and how their actions were influenced by the specific context of the aforementioned region.

13 Gestwa, "Ökologischer Notstand," 366–381; Arndt and Coumel, "A Green End," 112–121; Josephson (et al.), *Environmental History*, 274–284.

14 Weiner, *Little Corner* (notably chapters 18 and 19); Obertreis, *Imperial Desert Dreams*, 397–400.

15 Coumel, "Student Corporatism."

Developments after the breakup of the Soviet Union will take centre stage in the second part of the chapter. The relevance of the Far East's location in the Asia-Pacific, including for environmental matters, will then become clear.

5.2 Fighting Emissions in the Late Soviet Far East (1978–1990)

5.2.1 Car Exhaust Emissions and Climate Change in the Far East and Beyond

Efforts to reduce emissions in the late Soviet Far East were not confined to car emissions. As one might expect, factory emissions and, notably, emissions of the regional coal-fired power stations played an important role. Indeed, millions of rubles were spent during the last Soviet decade on reducing emissions from these sources in Primorskii Krai (Primor'e), the most densely populated and utmost southwestern part of the Far East.¹⁶ However, considerably more time and energy was spent on campaigns to reduce emissions from car traffic. This might be surprising in view of the notoriously polluting factories in the USSR and the relatively small number of cars on Soviet streets, but only at first glance. In fact, the number of cars had been increasing quickly since the 1970s.¹⁷ Already in the 1980s, cars were the main source of toxic emissions in Primor'e's towns, being responsible for more than half of them (today, cars account for more than eighty percent of toxic emissions in Russian cities).¹⁸

Reducing car emissions was and is of high interest to climate change mitigation efforts: by 2009, cars accounted for some twenty-five percent of Russian CO₂ emissions.¹⁹ Since then, this share has doubtlessly grown as the number of cars in Russia has grown faster than industrial output. As elsewhere, traffic thus plays an increasing role in Russia's contributions to climate change. Remarkably, the danger of "an undesirable climate change of the Earth" was already stressed in a 1985 leaflet by Primor'e's Regional State Inspection for Air Protection; it was addressed to car drivers and explained the urgent need

16 Gosudarstvennyi Arkhiv Primorskogo Kraia, Vladivostok (hereafter, GAPK), f. 1488, op. 1, d. 219, ll. 25–26.

17 Siegelbaum, *Cars*, 238.

18 GAPK, f. 1488, op. 1, d. 299, 65; *ibid.* op. 1, d. 349, l. 26. Cf. Josephson et al., *Environmental History*, 308.

19 Bitiukova, *Sotsial'no-ekologicheskie problemy*, 235–236.

to reduce emissions.²⁰ Shortly beforehand, Iu. P. Kovtaniuk, who headed the same agency, had warned in an internal document that global warming was already happening and risked “a second worldwide deluge” unless emissions were reduced.²¹ This kind of argument did not appear often in internal documents of that time and was, arguably, not the main motivation for those engaged in the fight for reducing emissions. The main concern was the disastrous health effects of air pollution, which was responsible for pulmonary diseases, cancers, and other illnesses. The link between car emissions and climate change was, however, already clear to a number of decision-makers, including on the regional level, in late Soviet times; in view of the mentioned numbers, this link has grown ever since.

5.2.2 Problem and Pressure Group(s)

In the 1970s, concerns for the environment and the devastating environmental impacts of the Soviet economic model were on the rise in the whole Soviet Union.²² As mentioned before, in the new Soviet constitution of 1977, this heightened concern found its expression in several articles. In 1980, a Soviet law on the protection of clean air entered into force and was followed two years later by a corresponding RSFSR law. Both laws underlined the need to take measures to reduce air pollution at various levels. The question, however, is how these laws were interpreted and implemented by actors in the regions and to what extent they had practical results. Little is known so far about practical actions following these laws in various regions of the Soviet Union. In the case of Primorskii Krai, sources point to the fact that the necessity of acting to reduce air pollution was taken seriously by a number of actors, who seized on the provisions of the aforementioned laws as an opportunity for engaging in this fight.

There are a number of indications that Far Eastern developments in this respect preceded the nationwide trends. From 1978, Primor’ë’s branch of the VOOB saw its Section for the Protection of Atmospheric Air get into action.²³ Hence, there was a semi-official pressure group whose members took it upon themselves to lobby the issue. In May 1979, a report on the

20 GAPK, f. 1488, op. 1, d. 349, l. 120b.

21 GAPK, f. 1488, op. 1, d. 299, ll. 21, 25.

22 Cf. Bruno, *Nature*, 202–213.

23 GAPK, f. 1488, op. 1, d. 187, ll. 1–10.

situation concerning air pollution in Primor'e exposed troubling results: in the administrative centre Vladivostok, in eighty-five percent of measured cases, the concentration of noxious substances in the air (such as carbon monoxide, hydrogen sulphide, and fine dust) exceeded the maximum allowed by the sanitary norms; the situation in other towns of Primor'e was similar. Regarding the main emitters of these substances, the report differentiated between the various towns; generally, it named above all the big coal-fired power plants, a number of industrial enterprises, and—in all cases—car traffic.²⁴

After preliminary small-scale experiences in the town of Spassk-Dalny in 1979, the first region-wide month-long action (*mesiachnik*) for reducing car emissions was held in Primor'e in 1980. Following the recommendations of those involved in the operation, in 1982, Primor'e's *Kraiispolkom* (the regional executive governance body) decided to organise such operations from then on annually under the title of Clean Air.²⁵ It should be noted that, at that stage, Primorskii Krai was no exception. The 1982 Clean Air Operation was, in fact, a Soviet-wide one that was under the auspices of the Soviet Minister of the Interior—with its State Car Inspections (GAI)—and the Hydrometeorological Agency (*Goskomgidromet*) with its sub-agency for supervision of pollution and the environment.²⁶ However, from the data available so far, it appears that actors in Primor'e were doing more and earlier than what was prescribed from the centre: with their 1980 region-wide *mesiachnik*, they preceded the Soviet-wide trend by two years. Interestingly, the 1982 Clean Air Operation was deemed to last from May 25 until June 10, while the operation in Primor'e was held two weeks longer, from May 15 until June 15. Moreover, the focus of the Soviet-wide action was obviously on controls at companies with a substantial vehicle fleet, while the operation in Primor'e also included controls for thousands of private cars on the road. Clearly, more research in other regions is needed to put the results from Primor'e into a broader comparative perspective. The case of Odessa shows, for example, that controls on the road took place elsewhere as well.²⁷ However, it is, at least, apparent that the actors involved in Primor'e were proactive and serious in their engagement for reducing noxious exhaust emissions.

24 Ibid. II.

25 Ibid. 14–16; GAPK, f. 1488, op. I, d. 219, ll. 2–5, 18; GAPK, f. 1488, op. I, d. 299, ll. 3–6.

26 See the report on the Soviet-wide 1982 “operation” in Gosudarstvennyi Arkhiv Khabarovskogo Kraia, f. R-757, op. I, d. 167, ll. 7–16ob.

27 Gosudarstvennyi Arkhiv Odesskoi Oblasti, f. R-7859, op. I, d. 385, ll. 18–19; f. R-8002, op. I, d. 104, II. 32–33.

While the first impetus was obviously given by members of the Clean Air section of Primor'e's VOOP, it becomes clear here that activists of this section, party functionaries (as represented in the *Kraiiispolkom*), and state functionaries (represented by members of the Regional State Inspection for Air Protection and the State Car Inspection) worked hand in hand for the goal of reducing air pollution. Moreover, there was a partial personal overlap, as Kovtaniuk, the aforementioned head of the Regional State Inspection for Air Protection, was at the same time the head of the Clean Air section of Primor'e's VOOP.²⁸ This important position of state functionaries and experts, dealing often with environmental questions both in their profession and in Primor'e's VOOP Clean Air section, was a general characteristic of the section. By 1987, including Kovtaniuk, the section counted fifteen members (eleven men and four women); among them were another representative of the Regional State Inspection for Air Protection, a leading VOOP functionary, two professionals of the State Car Inspection, two of the State Epidemiological Service, three of Vladivostok's Centre for the Research and Control of Pollution of the Environment (VTsKZPS), and one representative each of the military court (GVS) and Primor'e's main car transport trust (Primavtotrans), energy trust (Dal'energo), and main ship building factory (Dal'zavod).²⁹ Thus, the industry that was concerned by the anti-pollution actions pushed forward by the section was represented in it but was clearly in the minority.

Already, the seven-headed commission dealing with the organisation of the first month-long action (*mesiachnik*) for the reduction of exhaust emissions in the town of Spassk-Dalny, which was started in December 1979, had shown a similar composition, though it also included two (female) representatives of the regional media: a radio reporter and the head of the letter section of the newspaper *Maiak Kommunizma* (Beacon of Communism). Both media had been instructed to "elucidate systematically the progress of the *mesiachnik* in the press and the radio." This first clean air action in Primor'e had been decided by Spassk's municipal Council of People's Deputies (*Sovet Narodnykh Deputatov*) at the instigation of Primor'e's VOOP and of the leadership of the regional State Car Inspection.³⁰ Again, both the composition of the aforementioned commission and the decision process for this first action testify to a close cooperation of regional state actors, professionals, and the VOOP's Clean Air section regarding this environmentalist cause.

28 GAPK, f. 1488, op. 1, d. 299, l. 33.

29 GAPK, f. 1488, op. 1, d. 349, l. 3.

30 GAPK, f. 1488, op. 1, d. 187, ll. 14–15.

It can be assumed that this close cooperation and engagement of environmental activists with state and party functionaries (who were, in fact, partly the same persons) was an important reason, if not a precondition, for the relative vigorousness and seriousness of the anti-air-pollution actions in late Soviet Primor'e.

Several provisions of the Soviet and Russian laws for clean air protection provided the conditions for this kind of collaboration: they stipulated the establishment of maximum norms for (among other things) air pollution for each mode of transport, including cars; these had to be established on the regional level (therefore, by regional authorities) depending on the overall pollution in the given district (*raion*). The latter was to be regulated by Soviet-wide maximum norms. For enforcing these norms and regulations, societal organisations such as the “societies for nature protection” were, by virtue of the abovementioned laws, explicitly expected—and thereby authorised—to contribute and to work hand in hand with state organs in various respects. State organs were legally obliged to take these societal organisations' considerations into account in the fight for reducing air pollution.³¹

5.2.3 An Ambivalent Story: Operation Clean Air in Primor'e (1980–1990)

Each of the month-long operations that were held in the towns of Primor'e during the last decade of the Soviet Union entailed basically the same elements: selective controls of cars directly on the streets by members of the State Car Inspection and the Air Protection Section of Primor'e's VOOP branch; controls of cars, equipment, and procedures at road hauliers and other companies with substantial car fleets; lectures and other agitation measures for the employees of these companies; the (partly temporary) withdrawal from circulation of cars with excessive exhaust emissions; admonishments and administrative punishments for drivers of these cars and for management personnel at the respective companies; and an active propagation of the operation and its goals through the media (newspapers, radio, and television).³²

31 Cf. Art. 5–9, 11 of the Soviet Law for Air Protection (25.06.1980); Art. 6–13, 20–22, 26, 45, 47–48, 51–53, 55 of the corresponding RSFSR law (14.07.1982). As a matter of fact, the nature protection law of the RSFSR, passed in 1960 under Khrushchev, had already authorised VOOP to take an active part in the enforcement of the law: Coumel, “Student Corporatism”: IV.

32 E.g. GAPK, f. 1488, op. 1, d. 219, ll. 2–5; f. 1488, op. 1, d. 349, ll. 39–44.

An essential assumption of these operations was that car emissions depended in large part on driving style and on the regulation of motors.³³

It would be easy to write a story of failures and frustration in the fight against air pollution from traffic in late Soviet Primor'e. Throughout this decade, in the reports on the annual Clean Air Operations, a number of elements remained unchanged: a substantial double-digit percentage of controlled cars had emissions above the prescribed maximum levels (often as high as four to six times these levels); air pollution from car traffic remained substantial in the towns of Primor'e despite all measures and controls; in many cases, companies and the local GAI agencies did not have the measurement tools needed for effective regular controls; measurement instruments for diesel vehicles were lacking altogether throughout the decade, although local and regional agencies asked for them time and again; and, in many cases, the drivers and the management staff at companies, operating under economic constraints and suffering (as expressed in the reports) from "economic short-sightedness," obviously lacked the motivation and competence to reduce emissions.³⁴ A report on the 1987 Clean Air Operation in the town of Nakhodka was symptomatic in this respect: not only were there no specialists for reducing emissions at any of the big companies with substantial car fleets in the town, but none of these companies were ready to invest any time for a lecture on that topic by an external specialist that was offered to them during the operation.³⁵ With such attitudes prevailing among a large part of professional drivers and their superiors, notwithstanding all efforts to propagandise the necessity for reducing toxic emissions, it is no wonder that the fight for clean air remained an uphill battle.

Nonetheless, it would be misleading to reduce this fight to a story of failures: regional and local authorities and volunteers were obviously very serious in their endeavour to reduce harmful car emissions. During the first, region-wide operation in 1980, almost 7,300 cars were tested, of which more than 2,100 were withdrawn from further circulation because they had excessive emission levels. In 1982, some 4,000 were controlled and 914 banned from further use (more than 600 drivers were fined); one year later, more than 2,400 out of a total of 4,236 controlled cars (thus, almost fifty-seven percent) were withdrawn from circulation—a clear sign that inspectors had hardened

33 GAPK, f. 1488, op. 1, d. 367, ll. 15a–15v.

34 GAPK, f. 1488, op. 1, d. 219, ll. 41, 47; f. 1488, op. 1, d. 299, ll. 59–60, 64–67; f. 1488, op. 1, d. 349, ll. 31–32, 37a–37b, 47–49.

35 *Ibid.* (d. 349), l. 36.

their stance. While in 1985, for reasons unspecified in the sources, the number of controlled cars fell to just over 200, a five-year comparison for the years 1985–1989 testifies to a big increase in the number of controlled cars and a considerable decrease in the percentage of cars with excessive emission levels (from two thirds in 1985 to slightly less than one third in 1989).³⁶

It should be stressed that the withdrawal from circulation—sealed by the taking off of the number plates—concerned, at times, not all controlled cars with excessive emissions but just those where this excess was especially high. Whereas in the 1980 and 1983 Clean Air Operations in Primor’e, all cars that were found to have excessive emissions appear to have been banned from circulation, in 1982 this applied to just 914 cars out of 1,744 with excessive emissions; in 1989, it was the case for 3,029 out of some 7,300 cars with emissions above the norm (from a total of 23,625 cars controlled during that year’s operation in Primor’e).³⁷

This reservation notwithstanding, hidden behind these figures and unaccounted for in the sources at our disposal so far, one can only imagine the conflicts and the frustration of drivers concerned by excessive emissions and effective withdrawals of their cars—all the more so given the years-long waiting times and high prices for receiving a new car as well as the lack of service stations still usual in the USSR of the 1980s.³⁸

However, it is important to bear in mind the guiding assumption that exhaust emissions depended mainly on the behaviour of drivers. Thus, a 1985 leaflet from the Regional State Inspection for Air Protection addressed to drivers contained detailed advice on how to lower emissions. Apart from standard advice to switch off their motors at long stops and to plan their routes in a way that avoided unnecessary decelerating and accelerating, the leaflet admonished drivers to regularly adjust the fuel injection systems and, above all, the carburettors of their cars, as an insufficiently adjusted carburettor would result in up to double the amount of noxious emissions. Likewise, it was necessary to keep spark plugs in good condition and to avoid underinflation of the tyres, as otherwise, considerably more fuel consumption and, therefore, emissions would be the consequence.³⁹ Another (internal) VOOP document about the

36 GAPK, f. 1488, op. 1, d. 219, ll. 3, 26, 41, 48; f. 1488, op. 1, d. 299, l. 19; d. 349, l. 64; d. 367, ll. 14–15.

37 GAPK, f. 1488, op. 1, d. 219, ll. 3; 26; 41, 48; *ibid.*, d. 367, ll. [14–]15.

38 See Siegelbaum, “On the Side,” 6–7; Gajetel, “Appealing,” 122–123, 133–137. The sources at my disposal unfortunately do not shed light on the reaction of the drivers to the withdrawals of their cars.

39 GAPK, f. 1488, op. 1, d. 349, ll. 12–14.

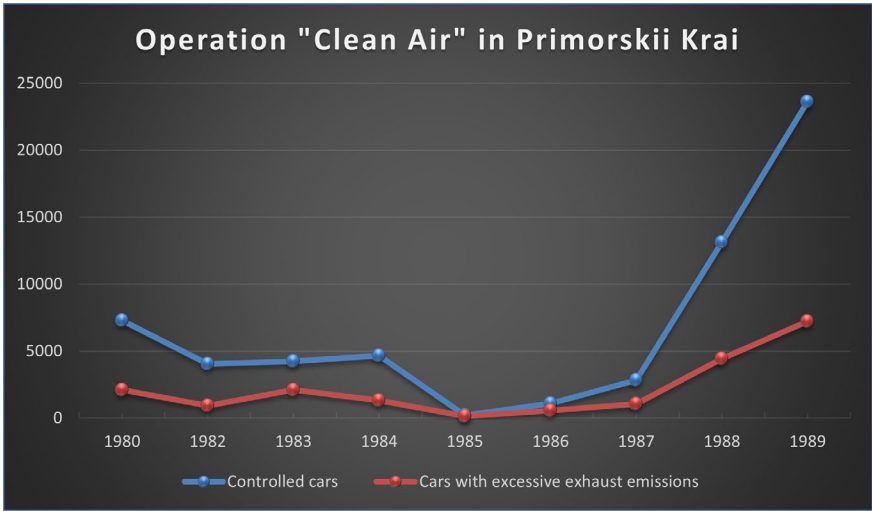


Fig. 1 Operation Clean Air in Primorskii Krai (B. Beuerle).

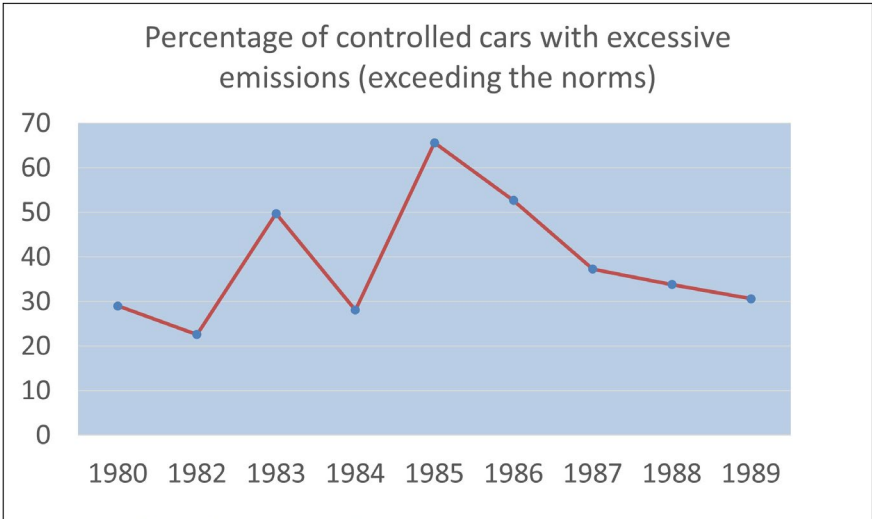


Fig. 2 Percentage of controlled cars with excessive emissions (B. Beuerle).

results of the 1984 Clean Air Operation in the region had stated that many drivers were tuning up their motors themselves to improve their performance and were ignoring the fact that this was leading to a sharp increase in emissions.⁴⁰ If excessive emissions were the result of such tuning up or of omitted adjustments of carburettors or tyres, this also meant that withdrawals of cars from circulation did not have to be definitive but were obviously, at least in part, temporary—valid as long as the necessary adjustments were not undertaken and the cars thereafter presented to another inspection.⁴¹

As the adjustments of carburettors and fuel inspection systems demanded a certain technical knowledge that, notably, could not be expected from all private car drivers (whose numbers were growing steadily),⁴² it was of apparent help—and explains at least partly the lowering of the percentage of cars with excessive emissions—that, from 1987, responsible authorities of some towns adopted what might be called a more constructive approach: instead of just banning cars from circulation, fining drivers and responsible companies, and lecturing drivers how to reduce emissions, they arranged technical support for reducing emissions. During the Clean Air month, garages were to offer drivers emission controls in the framework of the yearly technical inspection and, if needed, were to regulate the motors—most often, this concerned the carburettors—in order to lower the emissions of carbon monoxide and other harmful substances.⁴³ In addition, a number of recommendations made in previous reports were put into place later in the decade: the equipment of town agencies and companies with measurement instruments improved substantially over time, environmental protection units were established at big companies, and at some companies, drivers got “passes [*talons*] of toxicity” in order to keep an account of emissions from their cars. All this led to a substantial decrease in the share of cars tested with excessive emission levels and of the traffic’s share in overall air pollution in Primor’e’s towns.⁴⁴ The least

40 GAPK, f. 1488, op. 1, d. 299, l. 18.

41 The sources at my disposal are not very explicit in this regard, but it is possible to find at least some hints to this in part “temporary” character of withdrawals from circulation: F. 1488, op. 1, d. 367, [14–]15: “[...] Temporarily, 3,029 cars were banned from further use [*ekspluatatsiia*] [...]” [translation BB]), [16–]17: “[...] During the inspection [*proverki*], more than sixty number plates were taken off; after an additional adjustment, the drivers of these cars will represent their cars for another inspection. [...]” [translation BB]).

42 The Far Eastern town Spassk-Dal’nii for example, with some 55,000 inhabitants, already counted in 1982 more than 16,000 private “cars and motorbikes” and an “intensive increase of car traffic”: GAPK, f. 1488, op. 1, d. 219, l. 23.

43 GAPK, f. 1488, op. 1, d. 349, ll. 34, 37aob, 49, 50.

44 Ibid. ll. 37, 64; f. 1488, op. 1, d. 367, ll. 11, 24.

that one can say is that the fight for reducing emissions in late Soviet Primor'e significantly exceeded the symbolic realm and had some palpable results.

However, in the last years of the Soviet Union, from 1989, reports on the Clean Air Operations in various towns of Primor'e struck a new tone of frustration and disillusionment. For example, inspectors in Nakhodko stressed that, because of new administrative rules, cars with excessive emissions were not withdrawn from circulation any longer and drivers not fined. More and more drivers were reported as complaining that they had to operate overaged cars and that the necessary spare parts for regulating the motors in the right way were lacking; even more alarming, those rare new cars that were delivered exceeded the emissions norms from the start and could not be regulated in the right way. Company personnel refused to take part in the respective environmental protection units and to pay membership fees. A severe lack of adequate petrol objectively contributed to the pollution; diesel measurement tools were still not delivered; and inspectors as well as environmental activists stressed that, for the fight against air pollution to be more effective, it would have to be undertaken on a constant basis instead of being limited to month-long actions—a demand that remained unfulfilled.⁴⁵ Overall, it appears that, with market mechanisms introduced and the economic crisis intensifying,⁴⁶ the fight for reducing car emissions lost momentum and support—an omen of developments in post-Soviet times.

5.3 Developments in Post-Soviet Times

5.3.1 The Asia-Pacific Comes In: Japanese Cars in the Russian Far East

During these very last years of the Soviet Union, formal economic ties and subvention schemes disintegrated due to the worsening economic crisis, market elements were introduced, and formerly closed-off parts of the Soviet Far East opened up for external ties and business. The Far East's location in the Asia-Pacific gained a new importance that has grown ever since.⁴⁷ This was the case for cars and air pollution as well, in various respects: already

45 Ibid. (d. 367), ll. 11–13, 16–18, 27–29, 31.

46 Cf. Hildermeier, *Geschichte*, 1022–1025, 1032–1033, 1042–1047.

47 Minakir, “Russian Far East”; for a cautious report and outlook on the consequences for the region itself, see Troyakova, “Primorskii Krai.”

from the late 1980s, second-hand Japanese cars had started to appear in Vladivostok's streets, initially imported in, at best, semi-legal ways by sailors who were employed in the trade business with Japan. From the early 1990s, this business, now legal in principle, became a mass phenomenon in Vladivostok and, subsequently, in the whole Russian Far East. Early in 1992, the port of Vladivostok was officially opened to foreign trade by a decree of Boris Yeltsin. The first second-hand car market in Vladivostok had its place in a stadium and was replaced in 1993 by a new location, the by-now-famous Zelenyi Ugol (Green Corner).⁴⁸

The number of second-hand Japanese cars—much more popular than Russian brands and often very affordable—that was sold at this location grew from then on in spectacular ways. By 2008, more than half a million foreign cars were imported to the Russian Far East—nearly all of them second-hand Japanese cars. Following a number of new tariff obligations (which provoked wide-spread protest in the Far East), regulations, and the financial/economic crisis (2009), this number dropped to merely 80,000 in 2009 but recovered to some 132,000 by 2012. For Japanese car drivers, this has been a convenient way to get rid of their old cars, which are expensive to maintain due to Japanese security and registration regulations.⁴⁹

Following this large influx of Japanese second-hand cars, by 2008, Vladivostok had the status of the Russian city with the highest density of cars per 1,000 inhabitants by far (566—against 384 in Krasnoïarsk, which ranked second) and has retained this status ever since. At the same time, by 2017, Primorskii Krai was the region in Russia with the second-oldest cars (right after Kamchatka), with an average of more than twenty years—compared to less than thirteen years in Russia as a whole.⁵⁰

5.3.2 Environmental and Social Consequences and Developments

As a consequence, today, Vladivostok's streets are overcrowded with (over)aged second-hand cars, and daily traffic jams are the rule. The city's location on the sea notwithstanding, you can smell the *gazovannost'* (pollution with exhaust

48 Primamedia, "Avtorynku."

49 Brooke, "Japan's Used Cars." In 2008, Japanese second-hand cars accounted for more than fifteen percent of overall Japanese exports to Russia and almost one third of overall foreign imports to Russia's Far East. Tabata, "Russo-Japanese Economic Relations," 433–435; Devaeva and Kotova, "Vneshniaia torgovlia," 1–2, 7–8.

50 Zhurman, "Pochemu."

emissions) in the air. On average, cars in Vladivostok today most certainly emit less than in the 1980s, but their numbers have grown so much that air pollution from car traffic has hardly decreased since then. Indeed, experts at the regional hydrometeorological office (*Primgidromet*) have confirmed more than once in recent years that Vladivostok has a substantial pollution problem, which is notably related to car transport.⁵¹

It should be stressed that, at least since the late 1990s, environmental standards and regulations are, in principle, at least as ambitious as in late Soviet times; concerning the most recent years, they are certainly considerably stricter regarding emissions per car (immission standards might be another matter). In fact, Russian regulators have chosen to adopt the Euro norms in this regard, although they come into effect with a delay of several years compared to the EU.⁵² What has changed is that, in late Soviet times, environmentalism and the fight against air pollution in Primor'e's street had a lobby—the regional VOOP section, the engaged members of its Clean Air sub-section, and the state and party actors backing them—whereas in post-Soviet times, the position and morale of environmental activists appear to be much weaker so far when it comes to car transport.

Most people in the city seem either not to notice the problem (“we are saved by the wind”—*nas spasuet veter*) or to be fatalistic about it: “it’s a car drivers’ city” (*gorod avtomobilistov*) is a frequent dictum, insinuating that there is nothing one can do about it. An environmental activist told me that anyone who would dare to propose measures for regulating and reigning in car traffic would be chased from the city.⁵³

In accordance with these dictums, environmentally friendly public transport services—notably trolleybus and, most drastically, tramway lines—have been considerably reduced since the early 1990s under budgetary constraints and to make additional room for cars.⁵⁴ Apart from the inner city centre, streets are often without proper pavement, which, together with air pollution, renders walking unattractive and, at times, dangerous.⁵⁵ In recent years, there have been promises and initiatives for turning Vladivostok into a bicycle-friendly city, but in contrast with cities like Moscow and Saint Petersburg, so far, concrete steps for creating an infrastructure for bicycle

51 VL Novosti, “Ekologi otsenili”; Polyakova, “Spetsialisty.”

52 Therefore, the Euro 5 norm took effect in Russia early in 2016, seven years after the EU. Fomchenkov, “V Rossii.”

53 Interview in November 2017 with representative of environmental NGO.

54 VL Novosti, “Ot omnibusov”; Rozaliev, *Tramvai*, 99–107.

55 Izmailovskaia, “Trotuary.”

riders in Vladivostok have been largely missing.⁵⁶ All these factors contribute to the streets' overcrowding with cars and are thereby, in some sense, part of a vicious circle.

It can be assumed that, with an average age of more than twenty years, many of the cars on Vladivostok's streets do not adhere to the official exhaust emission norms. According to Russian media reports, notwithstanding the legally mandatory regular inspection, a majority of car drivers in cities like Vladivostok have, in practice, been simply buying the vehicle inspection certificates without any real inspection.⁵⁷ In the same time, much like in Western countries, effective on-the-road controls by state inspectors—let alone by environmental activists—seem to be quasi-non-existent. A number of ecological NGOs and organisations exist and are active in the region, dealing with important issues like deforestation, loss of biodiversity, and pollution through coal-mining and -shipping (to name but some). In contrast, the fight against excessive exhaust emissions has not played a prominent role on their agenda so far. They also lack not only the political backing and lobby but the legal possibilities for such actions, as, contrary to the Soviet laws of 1980–1982, the current Russian law for the protection of clean air (dating from 1999) does not assign any concrete role to societal organisations in the fight against air pollution.⁵⁸

It would be tempting to remind the Far Eastern public that there was a regional (late Soviet) tradition of fighting car emissions, which could be resumed.⁵⁹ However, the prospects of having similar measures adopted any time in the near future—let alone withdrawing thousands of cars from circulation because of excessive emissions—are certainly slim. Whether it would be desirable is yet another question. As in other contexts, the enforcement of ecological rules would probably lead to social tensions and protests, as the Japanese second-hand cars are much cheaper and more affordable than any new car that complies with the latest ecological standards.⁶⁰

As a matter of fact, Vladivostok already experienced a wave of social protests in 2008, when the import tariffs on foreign second-hand cars more than

56 Petrachkov, "150 tysiach"; Livshits, "Velosipednaia revoliutsiia."

57 VL Novosti, "Avtovladel'tsy"; Barshev et al., "Vse te zhe osmotr"; for the average age of cars see Zhurman, "Borozdy ne portit?"

58 See the rather vague Art. 26 of the Federal'nyi zakon ot 04.05.1999 g. N° 96-F3 "Ob okhrane atmosfernogo vozdukha."

59 So far, I am lacking information on what has become of those actors engaged in this late Soviet fight after 1991. Further research would be needed in this regard.

60 Brooke, "Japan's Used Cars."

five years old were drastically heightened. While the protests were famously struck down by an OMON corps, which was flown in from Moscow, for some time, inventive car dealers in the Far East resorted to importing old Japanese cars in the form of low-tariffed component parts, which were reassembled on Russian soil. Once this loophole was closed by the authorities—with a decision that reassembled cars would not be registered any longer—sales shifted to slightly less aged Japanese cars. From 2015, the economic crisis, the devaluation of the ruble, and the introduction of new technical rules and standards seem to have considerably reduced the influx of Japanese second-hand cars sold in Vladivostok. However, by 2018, a new upswing was apparent.⁶¹

5.3.3 The Asia-Pacific Context and Prospects for Emission Reductions

While the abundance of Japanese second-hand cars has made cars more available for everybody in the Russian Far East, the closeness of Japan—and, therefore, the Far East's location in the Asia-Pacific—has, so far, been more curse than blessing for the ecological and sanitary situation in Vladivostok and for its overcrowded streets. However, there is a chance that this will change in the future. To begin with, as long as the dominance of Japanese second-hand cars in the Far Eastern car market prevails, the current and future levels of car emissions in the Russian Far East depend on the present development and composition of Japanese cars, and this implies that Japanese ecological standards for cars will start to apply *de facto* in the Far East with a delay of some 5–10 years. In fact, from 2017, a considerable increase has been reported in the number of second-hand Japanese electric cars registered in the Russian Far East.⁶² As of 2019/2020, Primor'e was the region in Russia with the highest number (in *absolute* terms) both of plug-in electric cars and, by far, of hybrid cars—ahead of Moscow and other regions with a much bigger population.⁶³ Paying tribute to this trend (and in order to enhance it), in September 2019, the energy giant RUSHydro started to install a net of express charging stations in Primor'e, hailed by the region's acting vice governor, Elena Parkhomenko, as a step for the development of “new ecologic transport” in Primorskii Krai.⁶⁴

61 Primamedia, “Avtorynku.”

62 Drom, “Dal'nii Vostok”; Farniev, “Dal'nii.”

63 Primamedia, “Primor'e”; Savost'ianchik, “Gde v Rossii.”

64 Primamedia, “RusGidro.”

There were even hopeful plans to start production of electric cars in Primor'e with the help of Japanese know-how and investment.⁶⁵ Meanwhile, the overall ecological impact of electric cars depends very much on how the electricity is generated. In this respect, it is of interest that in recent years, Japanese, South Korean, and Chinese companies have started to invest in renewable energy projects in the Russian Far East.⁶⁶ If these developments continue, the Russian Far East's location in the Asia-Pacific can indeed, in this context, become a blessing for the air pollution situation in Far Eastern cities and for the regional impact on the global climate.

Whether as opportunity or as burden, the Asia-Pacific neighbourhood affects in various ways the amount of harmful emissions in the Russian Far East. It is, however, also clear that much of the future ecological developments in the region still depend on regulations set in Moscow as well as on attitudes among the regional population and decision-makers, and on urban transport policies in the Far Eastern towns themselves.

It appears that, in this way, a retrospective on the late Soviet period can, indeed, offer some examples for effective ecological engagement, which is worth keeping in mind when judging the environmental legacy and policies of that time.

5.4 Conclusions

More research will be needed in order to answer firmly and in a more general way the big questions asked at the beginning of this text. However, the case study that has been the subject of the present chapter indicates that, at least in parts of the Soviet Far East, the late 1970s and 1980s did, indeed, witness an "environmental turn."⁶⁷ The Soviet and Russian laws for the protection of clean air allowed for tangible ecological improvements on the ground. They presented a legal basis for the fight against excessive exhaust emissions, which was led by dedicated activists of the VOOP together with regional state and

65 Sidorov, "Druzhba s avtouklonom"; Far East Investment and Export Agency, "The Prometheus."

66 Davydova and Mudryi, "Solnce"; Fomicheva, "Na Dal'nem Vostoke"; Diatel, "Khevel"; Lossan, "Zarubezhnye."


67 For a similar conclusion regarding environmentalism in Soviet Central Asia—situating the "turning point" in the mid-1970s—see Obertreis, "Soviet Irrigation Policies," 115, 122. The new Envirohealth project led by Klaus Gestwa and Marc Elie (started in 2021) promises to shed more light on aspects of air pollution in the late Soviet Union.

party actors (many of whom were VOOP members themselves). At least in this case, the VOOP was certainly much more than a club of “strawberry breeders” and intervened from the early 1980s in a sphere where economic company interests were concerned. Their fight against excessive emissions was led in a concrete way and had palpable results. The damage done by pollution to human health and to infrastructure on a local level took centre stage in their motivation, but the arguments brought forward by engaged activists in the 1980s also included the necessity to mitigate climate change.

Only in the very last phase of the Soviet Union did the engagement for a reduction of exhaust—and, for that matter, CO₂—emissions lose steam and momentum against the background of the ever more severe economic and social crisis. Since then, the popularity and influx of second-hand Japanese cars has turned the Russian Far East into the Russian region with the most cars per inhabitant. Infrastructural policies one-sidedly favouring car transport and insufficient priority given to the enforcement of ecological provisions existing on paper have contributed to this development. While cars have become easily accessible to almost everyone, the region’s location within the Asia-Pacific has, in this way, had rather detrimental consequences for the ecological situation in the Far East’s cities so far. However, as of late, there are signs that a new engagement and investments by Russia’s Asia-Pacific neighbours in new modes of transport and renewable energies could lead to substantial ecological improvements in the future. Due to this context, the Russian Far East has the potential to become a frontrunner of more sustainable car transport within Russia. It remains to be seen whether these opportunities and chances will be seized for real.

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